

R E P O R T S
FROM
C O M M I T T E E S:
ELEVEN VOLUMES.

— (4.) —

EAST INDIA COMMUNICATIONS.

Session

1 *February* — 10 *August* 1866.

VOL. IX.

1866.



REPORTS FROM COMMITTEES:

1866.

ELEVEN VOLUMES:—CONTENTS OF THE

FOURTH VOLUME.

N.B.—*THE* Figures at the beginning of the line, correspond with the N° at the foot of each Report; and the Figures at the end of the line, refer to the MS. Paging of the Volumes arranged for The House of Commons.

EAST INDIA COMMUNICATIONS:

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R E P O R T

FROM THE

SELECT COMMITTEE

ON

EAST INDIA COMMUNICATIONS;

TOGETHER WITH THE

PROCEEDINGS OF THE COMMITTEE,

M I N U T E S O F E V I D E N C E,

A N D A P P E N D I X.

Ordered, by The House of Commons, to be Printed,
20 July 1866.

Tuesday, 27th February 1866.

Ordered, THAT a Select Committee be appointed to inquire into the practical working of the present systems of Telegraphic and Postal Communications between this Country and the East Indies.

Friday, 9th March 1866.

Select Committee nominated :—

Mr. Crawford.	Mr. Turner.
Lord Stanley (vacated his seat 6th July).	Sir Henry Rawlinson.
Mr. Childers.	Mr. Baillie.
Lord Robert Montagu.	Mr. Weguelin.
Mr. Stansfeld.	Sir Charles Bright.
Admiral Seymour (vacated his seat 6th July).	Mr. Laird.
Mr. Ayrton.	Mr. Moffatt.
	Mr. Schreiber.

Ordered, THAT the Committee have power to send for Persons, Papers, and Records.

Ordered, THAT Five be the Quorum of the Committee.

Thursday, 22nd March 1866.

Ordered, THAT all Petitions presented this Session relative to Postal Communication with India be referred to the Select Committee.

Monday, 23rd April 1866.

Ordered, THAT it be an instruction to the Select Committee on East India Communications that they be empowered to extend their inquiry to China and Japan, and Australia and the Mauritius.

Ordered, THAT the Select Committee do consist of 17 Members.

Ordered, THAT Mr. Marsh and Mr. Brooks be added to the Committee.

Monday, 16th July 1866.

Ordered, THAT Mr. Hunt and Sir James Fergusson be added to the Committee.

Friday, 20th July 1866.

Ordered, THAT the Committee have power to Report their Observations, together with the Minutes of Evidence taken before them, to The House.

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R E P O R T.

THE SELECT COMMITTEE appointed to inquire into the practical working of the present System of TELEGRAPHIC and POSTAL COMMUNICATIONS between this Country and the *East Indies*, and who were instructed to extend their inquiry to *China, Japan, Australia*, and the *Mauritius*;—
HAVE considered the matters to them referred, and have agreed to the following REPORT:—

1. IT appears from a table laid before your Committee by Mr. Valpy, of the Board of Trade, that the total value of imports into the United Kingdom, and of British produce exported therefrom, and total tonnage of vessels entered and cleared at ports in the United Kingdom, in the year 1865, were as follows:—

	£.
Value of Imports - - - - -	271,134,967
Value of Exports (British produce and manufacture) -	165,862,402
Tonnage of Vessels—	
Entered - - - - -	14,317,886
Cleared - - - - -	14,579,206

Of these quantities, British India, Singapore, Ceylon, Mauritius, China, China (Hong Kong), Egypt, the Dutch Possessions in India (Java, Sumatra, &c.), the Phillippine Islands, Japan, and Australia, contributed the following proportions:—

COUNTRIES.	Imports.	Exports.	Tonnage of Vessels.	
			Entered.	Cleared.
	£.	£.	Tons.	Tons.
British India - - - - -	37,395,372	18,254,570	664,391	671,856
Singapore - - - - -	2,169,056	1,442,450	77,835	50,292
Ceylon - - - - -	3,707,615	685,308	52,197	50,400
Mauritius - - - - -	1,246,299	596,848	41,029	30,805
China - - - - -	10,673,960	3,609,301	91,606	80,375
China (Hong Kong) - - -	773,068	1,561,851	14,408	42,848
Egypt - - - - -	21,773,250	5,985,087	361,419	488,268
Dutch Possessions in India (Java, Sumatra, &c.) - }	226	928,642	- Nil -	29,349
Phillippine Islands - - -	1,253,904	945,624	23,207	18,055
Japan - - - - -	614,743	1,520,895	9,361	19,602
Australia* - - - - -	10,283,113	13,352,357	156,649	387,239
TOTAL for the above-named Countries - - - - - }	68,117,356	42,897,846	1,492,102	1,869,090

2. It will thus be seen that upwards of 25 per cent. of the whole of the external commerce of the United Kingdom is transacted with the several countries above enumerated. The great importance of rapid and regular systems of communications between countries transacting business of such magnitude and importance, can hardly therefore be over-rated.

3. Many merchants, bankers, and others, engaged in carrying on these vast operations,

* Not including in any case precious metals.

operations, having complained of the insufficiency of the existing postal and telegraphic arrangements, your Committee have inquired into their allegations on both points, and carefully considered the circumstances in their several bearings.

“AS REGARDS THE POSTAL SERVICE.”

Existing Postal Contracts.

4. The now subsisting contracts between Her Majesty's Government and the Peninsular and Oriental Steam Navigation Company for the conveyance of mails between England and India, Ceylon, Mauritius, China, and Australia, are four in number. The first contract under which the India and China mails are conveyed, is dated the 1st January 1853, and is now terminable at one year's notice. Under this contract the mails were to be conveyed twice each way in every calendar month, between England and Alexandria, *viâ* Southampton and Marseilles; and twice each way in every month between Suez, Calcutta, and Hong Kong. The vessels so employed were to be of not less than 1,100 tons burden, and were to maintain an average speed of not less than 10 knots an hour. The Company also engaged to carry mails between Singapore and Sydney, once each way, in every alternate month, in vessels of not less than 600 tons burden, which should maintain an average speed of $8\frac{1}{2}$ knots an hour. The payment to the Company in respect of the India and China services was to be 199,600 *l.*, with a proviso that it was to be reduced to 179,600 *l.* per annum, six months after the opening of the railway across Egypt. In consequence of that proviso, and of certain other modifications, which have since been introduced in the contract, the amount in respect of the services in question is reduced this year to 162,125 *l.*, of which 86,567 *l.* have been voted in Committee of Supply, leaving 75,558 *l.* to be provided from other sources.

5. By a contract dated 7th July 1854, the mails were to be carried twice each way, every calendar month, between Bombay and Aden, in vessels of not less than 800 tons burden, and to maintain an average speed of 10 knots an hour. This service has since been extended from Aden to Suez. The payment to the Company in respect of these services was to be 24,700 *l.* per annum; but only 22,000 *l.* has been voted in Committee of Supply this year on account of them. This contract is also terminable at one year's notice.

6. Besides the above stated sums, 65,500 *l.* have been voted for “additional services,” making the entire vote of the present year, in respect of the India and China mail services, after deductions, and contributions from other sources, 174,067 *l.*

7. The Australian mails are now carried under a contract, dated the 17th day of November 1865, between the Postmaster General and the Peninsular and Oriental Company. The Company undertake to convey the mails from Point de Galle, *viâ* King George's Sound and Melbourne, to Sydney in 516 hours; and from Sydney, *viâ* Melbourne and King George's Sound, to Point de Galle in 564 hours, on the following conditions:

That a sum, after the rate of 120,000 *l.* per annum, shall be paid to the Company so long as it shall, upon the requisition of the Postmaster General, cause to be performed one such voyage each way in every calendar month:

Or, a sum after the rate of 130,000 *l.* per annum, if and so long as the said Company shall, upon the requisition of the Postmaster General, cause to be performed one such voyage each way in every lunar month of four weeks:

Or, a sum, after the rate of 170,000 *l.* per annum, if and so long as the said Company shall, upon the requisition of the Postmaster General, cause to be performed two such voyages each way in every calendar month:

Or, a sum, after the rate of 184,166 *l.* per annum, if and so long as the said Company shall, upon the requisition of the Postmaster General, cause to be performed two such voyages each way in every lunar month of four weeks.

This

This contract is to be terminable at 24 calendar months' notice. The sum to be asked in Committee of Supply in respect of this service, is 59,750 £, being one moiety of the contract payment, after allowance of 500 £ for discontinuance of Admiralty Surveys.

8. The Mauritius mails are carried under a contract dated the 16th day of April 1861, by which the above-mentioned Company undertook to convey mails once each way in every month between Suez and Mauritius, calling at the Seychelle Islands, for the purpose of landing and embarking mails on each of the homeward voyages, and on each of the outward voyages, except during the months of June, July, and August. The vessels so employed to be of not less than 850 tons burden, and to arrive and depart from Suez and Mauritius on certain days in each month, specified in a table inserted in the contract; but under a new contract, for a line between Mauritius and Point de Galle, entered into provisionally, the payment is reduced to 18,000 £. The payment for such services was 30,000 £ per annum, to be paid by the Colony. Notice has been given by the Company to terminate the contract, and the last voyage under it was to be made in the month of June last past.

9. The mails to Japan are carried every fortnight in vessels belonging to the Peninsular and Oriental Company, but for so much of the service as lies between Shanghai and Japan no subsidy is paid. The Company are now claiming a subsidy, as there are seasons of the year when the services may be discontinued for commercial purposes.

10. By an agreement made between the above-named Company and the Postmaster General, dated the 27th February 1866, amongst other matters to which it is not necessary to refer, it was agreed, that instead of the mails between England, India, and China, being carried at a nominal average speed of 10 knots an hour, with the necessary latitude for divergence from a direct line, according to the contracts of 1st January 1853, and 7th July 1854, they shall henceforth be conveyed between the several ports in the same number of hours as were provided in the time tables appended to those contracts, this being equivalent to an average speed of $9\frac{1}{2}$ knots in a direct line. The object of this modification was to establish the means of carrying out the system of penalties and premiums provided by the new agreement.

11. The Peninsular and Oriental Company possess a fleet of 57 steam vessels, of the aggregate tonnage of 84,176 tons, and of 19,230 horse power. Your Committee are of opinion that the services under the several contracts to which reference has been made, have been well performed, and the Assistant Secretary of the Post Office stated that no mail that was entrusted to this Company for conveyance was ever lost.

Bombay the Port for Indian Mails.

12. When the contract was made in 1853 for the conveyance of the mails by sea to Madras and Calcutta, such an arrangement was due to the political and commercial importance of those cities, and was also the most convenient method that could then have been adopted as regarded the distribution of letters in India, but circumstances have since happened which render a re-consideration and re-arrangement of the postal service between this country and India a matter of urgent necessity.

13. Mr. Riddell, the Director General of the Post Office of India, addressed a letter to the Secretary to the Government of India, on the 24th April 1860, in which he called attention to the fact, that the contract with the Peninsular and Oriental Company would expire in the following year, and mentioned some of the inconveniences which occurred under the existing system. He said:—"At present four mails are despatched from England and from India every month, two from London and two from Bombay, and two from Calcutta. According to the time table, 35 days are occupied between London and Calcutta, *via* Marseilles; 24 days between London and Bombay. The mail of the 10th January should reach Calcutta on the 13th February, while that of the 18th January should reach Bombay on the 10th February. It is clear that all places within three days post of Bombay

“ would receive the mail of the 18th January, *viâ* Bombay, before the mail of the 10th January reached Calcutta. At a place situated as Benares, the mail of the 10th January, *viâ* Calcutta, would be delivered on the morning of the 16th February. A mail of the same date, if sent *viâ* Bombay, would reach Bombay on the 2nd February, and be delivered at Benares on the 7th or 8th February. The mail which left London on the 18th January, *viâ* Bombay, would be delivered at Benares on the 15th or 16th February at the same time, or before the mail of the 10th January arrived, *viâ* Calcutta. Benares is about 1,000 miles from Bombay, and 422 miles from Calcutta.

“ The mail which left London on the 10th January is due at Calcutta on the 13th February; if it were sent *viâ* Bombay it would be due at Bombay on the 2nd February, and according to present rates of speed, and even with the existing means of transport, the letters would all be delivered in Calcutta on the 9th or 10th, and all Southampton newspapers by the 12th or 13th.

“ The case as regards Madras is similar. The mail leaving London on the 10th January is due at Madras, *viâ* Galle, on the 9th February; if sent by Bombay, it would be due on the 6th February, having reached Bombay on the 2nd *idem*.”

14. Since the date of the above letter, great progress has been made in the completion of the railway system in India. It appears from the evidence of the officers of the East Indian, the Great Indian Peninsula, and the Madras Railway Companies, that in the Spring of 1868 there will be continuous railway communication between Bombay, Calcutta, and the North Western Provinces of India; and that Madras also will be connected with Bombay by railway in July 1869.

15. In a despatch addressed to the Secretary of State for India on the 23d November 1865, by the Governor General in Council of India, it was stated that, “ The Nagpore extension of the Great Indian Peninsula Railway will be opened to Wurdah, within 60 miles of Nagpore, in January next, and will be completed to Nagpore, it is believed, in January 1867. Between Nagpore and Mirzapore the whole distance can be traversed by mail-carts throughout the year. Even now it will be seen from the dates for closing the mails, the mails *viâ* Galle have become for letters quite useless. The mail which left Calcutta this morning by the Galle route is due in London on or about the 27th proximo, while the mail which closes this evening for the Bombay route, and by which this despatch will be transmitted should, it is believed, reach London on or about the 21st.”

16. That Bombay should be the port for arrival and departure of mails between this country and India is the opinion of Her Majesty's Postmaster General. In a letter dated 14th July 1865, written by the Assistant Secretary of the Post Office to Mr. Merivale at the India Office, it was said, “ The Postmaster General fully agrees with Sir C. Wood and the Government of India, in the opinion expressed in your letter, of the advantage of substituting for the present postal service with India a weekly service, and in thinking that such service should be exclusively with Bombay.” And Mr. Hill also informed your Committee that letters sent to Bombay would arrive at the best possible point in India for their speedy distribution, and that the gain to the public would be very great indeed.

As to Weekly Mail to India.

17. Mr. Riddell, in his letter to the Government of India of the 24th April 1860, having strongly recommended the establishment of a weekly mail, *viâ* Bombay, the Governor General in Council, in sending that letter to the Home Government, said, “ In forwarding the Director General's letter for consideration of Her Majesty's Government, we beg to express our concurrence in his views of the expediency of providing as soon as possible for a weekly postal communication with Bombay, whereby the whole of India would receive letters by every mail. At present only a very small part of India has the benefit of four mails in the month, the whole of the North Western Provinces, the Punjab, Scinde, and Bombay, and a great portion of the Madras Presidency receiving no benefit whatever from the two mails which are sent *viâ* Galle.”

18. The Assistant Secretary to the Post Office stated to your Committee that the Post Office had long desired to see a weekly mail established. That it would be much more convenient to them, and, what they regarded with greater interest, that they believed it would be very advantageous to the two countries.

19. In January 1865, a memorial, signed by most of the principal merchants and bankers in London, engaged in commercial and monetary transactions with India, was presented to the Postmaster General, praying that a weekly mail might be established between London and Bombay, to leave London on Friday in every week. The East India and China Association of Liverpool, the Chamber of Commerce at Manchester, the merchants and bankers of Madras, the Bombay Chamber of Commerce, and the Bengal Chamber of Commerce have also approved of such an arrangement.

20. The Assistant Secretary to the Post Office stated to your Committee that, regarding the question of the charge for carrying the mails from a profit-and-loss point of view, which consideration is in the opinion of the Post Office of great moment, the present loss on the Indian service amounts to 48,000 *l.* a year, and on the China service to 34,000 *l.*, a total loss of 82,000 *l.*, the half of which is borne by the Indian Government. He estimates that by sending 52 mails a year each way, between London and Bombay, instead of 24 mails each way between London and Bombay, and 24 mails each way between London and Calcutta, an additional expense would be incurred, amounting to about 30,000 *l.* a year; and Mr. Hill had previously stated that, in the opinion of the Postmaster General, the weekly mail might have been established if the Indian Government would have consented to allow an extra charge of 6 *d.* on all letters which now pay 6 *d.* and 10 *d.*; but that the Indian Government having declined to concur in the expediency of such an increase in the rates of postage, it had been the view of the Post Office, whatever additional expense might be entailed by the establishment of a weekly mail to Bombay ought to be borne exclusively by that Government.

21. Your Committee cannot assent to the doctrine, that interests so important from every point of view, whether political, social, or commercial, as those which connect the United Kingdom with the largest and most valuable possessions of the Crown, should be prejudiced by an insufficient postal service, because the establishment of an efficient service might leave an apparent loss of no great magnitude to be borne by the two countries. They submit that a question of profit or loss, within reasonable bounds, is a consideration entitled to little weight in the case of so important a postal service as that between England and India. They concur in the views expressed on this subject, in a letter addressed by the India Office to the Assistant Secretary to the Post Office, on the 5th October 1865, in which it was said, "Sir Charles Wood cannot, however, regard the question "as one merely affecting the charge on the Imperial revenues. It has been the "perception of the bearing of increased postal communication on the wealth and "progress of a country that has induced Statesmen of late years to consent to "fiscal sacrifices for the purpose of obtaining it. There can be no doubt that "increased postal communication with India implies increased relations with "that country, increased commerce, increased investment of English capital, "increased settlement of energetic middle-class Englishmen; and from all these "sources the wealth and prosperity of England are more greatly increased than "that of India."

22. It appears from a despatch from the Governor General in Council of India to the Secretary of State for India, dated the 22d February 1866, that the Indian Government is willing to forward the establishment of a weekly mail, by accepting the responsibility of any loss that may thereby be incurred. In offering, however, to incur such risk, it points out the unfairness of such an arrangement in the following terms: "But we do not consider such an arrangement to be altogether unobjectionable. It would apparently be based on the explanation that "the service must be carried on at a loss, and if so, we venture to suggest that "it would hardly be desired by England that the whole of that loss should fall "upon the Indian revenue."

"It has been well pointed out, in Mr. Merivale's letter to the Post Office of "the 5th October, that the interests of England and India are jointly concerned "in this matter. There are no doubt thousands in the former country, to

“whom increased facilities for postal communication with India are just as important as they are to their countrymen living in India, and whether we look to the interest of this latter class only, or to the millions from whom Indian revenue is mainly drawn, and who have no direct interest in the matter at all, it would scarcely be generous for England to stipulate that the loss which might arise from the establishment of a proper and efficient postal service between the two countries should be borne wholly by the Indian taxpayer.”

Separate Service to India.

23. It has long been a source of dissatisfaction to the Indian public, as well as to the Government, that, from being associated with the China postal service from this country, the Indian Government has been made to contribute one-half of the loss incurred in that service.

24. The principle upon which such charge was imposed on the Indian revenue was stated in a Treasury Minute dated the 21st August 1854, and will be found in the evidence of the Assistant Secretary to the Post Office. It says, “That so far as the commercial and political relations with China went, the latter existing exclusively for the former, it was laid down that the interests of England and India were equal.”

25. The Court of Directors of the East India Company by no means acquiesced in the propriety and justice of this statement. In a letter addressed by their Deputy Secretary to Sir J. N. Redington, K.C.B., on the 7th September 1854, it was said: “The Court are unable to admit the validity of the reasoning upon which the Lords of the Treasury appear to base their opinion, that the interests of this country and of India are equal as respects some portions of these contracts. Whilst the Court are far from under-estimating the importance to India of the trade with China, they cannot refrain from adverting to the facts, that the Indian trade with China is now carried on principally by British shipping, and that, by the commercial and fiscal policy of England, the manufactures of India, which had been superseded in India itself by those of the United Kingdom, have been in like manner driven out of China. The Court think that upon reconsideration, and a reference to these points, the Lords of Her Majesty’s Treasury will admit that the value of steam communication with China is far greater to the people of Great Britain than it is to the people of India.”

26. In the despatch from the Governor General in Council of India, dated the 22d February 1866, addressed to the Secretary of State for India, a protest is urged against the Indian revenue being in any way chargeable with the loss incurred on the China service between England and Galle. It is said, “If it is admitted, as it is by the Postmaster General in England (and the point is too clear to leave any room for question about it), that the postal service with India should in future be exclusively to Bombay, it is difficult to understand upon what ground it can be seriously maintained that the Indian Post Office should continue to be charged with a portion of the cost of a postal subsidy given to steamers on the line between Suez and Galle, for the conveyance of China and Australian mails, or why any subsidy should be given to steamers running between Galle and Calcutta.”

“Speed of Mail Packets.”

27. The Indian public have long complained of the low rate of speed attained by the vessels which convey the mails to and from England to India, and it was stated to your Committee by a witness of great experience (J. D’Aguilar Samuda, Esq., a Member of this House), that in the present state of nautical science the contract speed of $9\frac{1}{2}$ knots an hour for the service between Suez and India is too low. He remarked, that the contract speed obtained by the West India Mail Company is $10\frac{1}{2}$ knots an hour; and he suggested that, with some modifications, some of the vessels now employed by the Peninsular and Oriental Company could be made to attain a knot an hour more than they now make; but he was of opinion that, in order to insure a satisfactory rate of speed, vessels of not less than 2,000 tons burden should be employed.

28. It is only fair to the Peninsular and Oriental Company to say that they have been, and still are, endeavouring to accomplish a better rate of speed. Mr. Howell, the secretary of the company, stated, that their ships had not come up to their own expectations and wishes upon the Bombay line. They had sought to produce a great improvement in the consumption of coal, and also an increase of speed, and alterations with these ends in view were now being made.

The Australian and China Mails.

29. As the separation of the Indian postal service from those mails which now proceed to Point de Galle will necessitate the reconstruction of the China service, and probably to its combination between Suez and Point de Galle with that to Sydney, your Committee invite attention to the efficient service between Europe, Point de Galle, and China every calendar month, performed by the Messageries Impériales, from Marseilles.

The Italian Route.

30. Your Committee have taken evidence to ascertain whether the Indian mails could be carried with advantage to the public over the Mont Cenis Railway, and through Italy to Brindisi, or some Italian Port, instead of through France to Marseilles, but they are not able to recommend that any steps should at present be taken to accomplish that object, although the contingency of that route becoming available at some future time should be provided for in any contract extending over a series of years.

"AS REGARDS THE TELEGRAPH SERVICE."

31. The political and commercial importance of possessing permanent means of communication with the several countries before referred to, by a telegraphic service at all times available and to be depended upon, is even greater in degree than the necessity for an efficient postal service; indeed, with regard to the bulk of commercial transactions between the merchants and manufacturers of this country and producers and consumers abroad, the Post Office has now become, in a great measure, subsidiary to the telegraph. Nor are the benefits derived from telegraphic communication confined to the mercantile community alone; the public in general are equally interested in the rapid transmission of authentic mercantile intelligence; for, if the effect be, as has been stated by witnesses of authority, to enable merchants and manufacturers to obtain with greater certainty and economy a regular and adequate supply of the commodities they require in the English market, it is the consumer in the end to whom the ultimate advantage is brought home by the process of competition.

The Telegraph to India.

32. The Indian and Home Governments have long been sensible of the extreme importance of possessing an efficient telegraph service between England and India, and have made great efforts and pecuniary sacrifices to obtain it; and if a full measure of success has not yet attended their exertions, the imperfections now complained of have arisen in a considerable degree from difficulties hitherto beyond their control.

33. A message intended for India is delivered to one of the two Companies in London having telegraphic communication with the Continent, "The Electric and International Telegraph Company," and "The Submarine Telegraph Company," and is forwarded by one of two principal alternative routes, the Turkish, or the Russian route. To reach Constantinople the lines principally used are through Vienna, or Turin. From Vienna messages are transmitted to their destination chiefly through Servia, and occasionally through Wallachia. From Turin they proceed by the Italian coast line, and the submarine cable, across the Lower Adriatic, and arrive at Constantinople by way of Salonica, and the shores of the Sea of Marmora. A telegram may, therefore, be dealt with by French, Belgian, Dutch, Prussian, Austrian, Bavarian, Minor German, Italian, Servian, or Wallachian administrations. After the message reaches Constantinople, it is forwarded under the terms of the "Indo-Ottoman" Convention, by an exclusive

wire to Bagdad, and thence, either to Fao at the head of the Persian Gulf, where it is received by British officers for despatch to Kurrachee by the Persian Gulf line, or, as an alternative, over the internal Persian system, by way of Teheran, Ispahan, and Shiraz to Bushire, where it again falls in with the main line. From Fao to Bushire and Kurrachee, the line is exclusively under the control of the Government of India. This line is submarine, with an alternative land line between Gwadel, on the Meckran coast, and Kurrachee, and with the exception of two or three interruptions in traffic, owing to temporary breaks in the cable, is shown to work admirably well.

34. A telegram by the Russian route proceeds *viâ* the Hague to Berlin, and from thence crosses the Russian frontier, passing through Mysolowitz and Tiflis to Julpha on the Arras, and from that place over the Persian system above described to Bushire. It must therefore be resorted to through the agency of the Dutch, Prussian, Russian, and Persian administrations, before it reaches any officer who is responsible to the British Government.

35. There is, therefore, an alternative route to India as far as the head of the Persian Gulf; but, in the case of an accident to the submarine cable to Kurrachee, all telegraphic communication with India must necessarily be interrupted.

36. From the returns for the month of January last, it appears that the messages between this country and India took the following routes to and from Constantinople :—

	Outward.	Homeward.
<i>Viâ</i> the Hague, Berlin, Vienna, Belgrade and Nissa (in Servia) - - - - -	64 per cent.	54 per cent.
<i>Viâ</i> the Hague, Berlin, Vienna, Bucharest, and Varna - - - - -	3 per cent.	44 per cent.
<i>Viâ</i> Paris, Turin, Valona, and Salonica - - - - -	29 per cent.	2 per cent.
Not specified - - - - -	4 per cent.	—
	100 per cent.	100 per cent.

37. The whole of the service is well described in a despatch, dated Teheran, 4th November 1865, from Lieutenant Colonel Goldsmid, the Superintendent of the Indo-European Telegraph to the Secretary to the Government of Bombay, and another dated Constantinople, 12th April last, from Major John U. Champain, R. E., of the Indo-European Telegraph Department, to Mr. Thornton, of the India Office, copy of which will be found at length in the Appendix.

38. The messages are forwarded to Constantinople by the telegraphic office on the Continent to which they have been addressed from London, by the route most convenient at the time; in some instances, and not unfrequently, they have been forwarded by way of Russia, to the great disadvantage of the parties interested in the speedy and correct transmission of the message.

39. The number of messages which passed over the Persian Gulf line, from its opening in February 1865 to the end of the year, appears to have been as follows:

Eastward :		£.	s.	d.
<i>Viâ</i> Turkey and Fao - - - - -	9,175	} Earning -	37,841	10 -
<i>Viâ</i> Bushire (Persian line) - - - - -	3,362			
Westward :				
<i>Viâ</i> Fao and Turkey - - - - -	7,552	} „ -	31,929	5 -
<i>Viâ</i> Bushire (Persian line) - - - - -	1,894			
TOTAL - - - - -	21,983	„	69,770	15 -

or on the average 3 *l.* 3 *s.* 5 *d.* per message.

40. During the months of January, February, March, and April of the present year, the total number of messages so carried is stated to have been (without distinction as to other routes in connection) 10,995, earning 34,590 *l.* 10 *s.*, or, on the average, 3 *l.* 2 *s.* 11 *d.* per message.

41. Your

41. Your Committee have been unable to obtain official information as to the cost of the Persian Gulf line, but the working expenses are stated by Colonel Goldsmid to amount to about 30,000 *l.* per annum.

42. The sum of 5 *l.* 1 *s.* is charged in all cases for a message not exceeding 20 words. Out of that sum about 3 *s.* 6 *d.* is retained by the Electric and International Company, and 2 *s.* 6 *d.* by the Submarine Company, the balance in each case being paid over to the authorities of the continental system to whose care the message is committed. They account in like manner to their successors in the chain of communication until the Persian Gulf line is reached, in respect of which the Government of India receives 2 *l.* 10 *s.* for the transmission of the message from Fao, and 2 *l.* from Bushire to Kurrachee, with 9 *s.* additional for its distribution in India.

43. Under a system such as this, where no continuous responsibility exists, much difficulty is necessarily experienced in tracing where the numerous delays and imperfections in the rendering of messages, of which so many complaints have been made, have taken place; and in very few instances have the public been successful in obtaining compensation for the disappointments they have met with.

44. The service under Russian control is stated to be working with regularity, the messages reaching Tabreez occasionally in the space of 12 hours. The ill success which has hitherto attended the transmission of messages to India by this route, is attributed to the imperfect management of the Persian service between Julpha on the Georgian frontier and Teheran; the exceeding rigour of the climate also during the winter months, especially on the line between Ispahan and Bushire, has presented many obstacles during the last winter.

45. A proposition has been submitted to your Committee for the establishment of an alternative line connecting Bunder Abbas, in the lower part of the Persian Gulf, with Ispahan, by way of Kerman and Yezd. This line, if practicable, with reference to political considerations, would present many advantages.

46. Lastly, a line constructed by the Turkish Government between Gaza on the Egyptian frontier, and Diarbekir on the main line of telegraph between Constantinople and Bagdad, has recently been opened for public traffic in connection with the Malta and Alexandria line. This line may present many recommendations as an additional useful alternative line in the event of interruption to the direct lines to Constantinople through the continent of Europe; but at present it cannot be said to be available to the public generally, in consequence of the refusal of the Turkish authorities to receive messages of origin or destination, otherwise than Egyptian, for transmission by the line.

47. With respect to the service through Turkey, there is a general concurrence of testimony that, as a rule, it is very defective. In a letter addressed to the Under Secretary of State for India by Major Champain, on the 31st August 1865, it was stated, "There is no doubt that the messages to and from India are unnecessarily and vexatiously delayed, and public confidence in the undertaking is being shaken. The organization of the Turkish lines is defective, and, in my opinion, will continue so, unless some decided step, such as the establishment of an opposition route, be taken. Mr. Courtenay invariably writes that either the Turkish Asiatic, or the Turkish European lines are working badly, and it does not seem that Colonel Goldsmid's suggestions have yet been complied with. I know that the insulators we proposed for the new wires between Constantinople and Diarbekir were rejected as too expensive, and cheap inferior wires were ordered from Belgium. In some measure, however, I can account for delays of late in consequence of the cholera panic, which frightened the telegraph clerks from their posts. Still I maintain, that blame is due to the Turks, and I much fear that they are really unable to work up to our standard of efficiency. Mr. Walton, the director of the cable, writes to me that 'our messages from Kurrachee to Fao, and *vice versa*, average 74 minutes for the last three months, and that the Bagdad men report 70 or 80 messages on hand, send 12 or 15, and then smoke hookahs, or say their prayers, for two or three hours, during which time Fao hears nothing of them.' Our cable, therefore, is working admirably; for months past there has been no interruption on the Persian line, and yet all our endeavours are nullified by the bad arrangements in Turkey. On the other

“hand, the Russians are naturally anxious to help our through communication, and have now offered to place their line, from St. Petersburg to the Persian frontier, entirely in the hands of a well-known London firm. Mr. Siemens, the head of that firm, spoke to me lately on that subject, and would, I believe, be willing to accept the offer, if there were any probability of his obtaining the control of the Persian line, from the Tabreez frontier to our telegraphic centre at Taheran. I am convinced that, supported by Russian influence in Persia and not opposed by us, he would succeed; and then we should, without having taken any active steps in the matter, obtain a second, and a really reliable line of communication between England and the Persian Gulf. Such an arrangement would also do more to render the Constantinople line efficient than remonstrances we may make, now the Turks know that we are entirely dependent on them.

48. In Colonel Goldsmid's report of the 4th November 1865, it is stated, “I see no remedy for the state of telegraphic correspondence in Turkey, but associating Englishmen with the native employés in the higher as in the inferior duties of the line, making at once the principal stations ‘Anglo-Ottoman,’ as at Fao; or else giving the whole line to a company or firm competent to work and supervise it, such, for instance, as Messrs. Bright and Clark, who have, moreover, a kind of vested interest in the cable from old association. The first of these remedies I had the honour of suggesting to the Home Government in May, but the question involved political considerations, and the re-opening of or supplementing a lately ratified convention, one intended to be final. There is manifestly no better chance at this moment available for successful telegraphy in Turkey than competition. We have a convention with Turkey to enable us to keep open telegraphic communication with India through her dominions. She has gone to expense and taken pains to carry out the terms of this convention. We are therefore desirous to avail ourselves of her lines as much as possible. It is found, however, in practice, that the Turkish route is more or less a failure. Turkey has not earned the whole blame, but she certainly earned the lion's share. Our companies (that is, the British public by their agents) learn that an opposition line is available through Russia. They take supposed advantage of this eagerly to transmit hundreds of telegrams, but the rush was premature. The Russian line had not then reached good working order. They revert again to Turkey, but not in regard to conventions. The convention was to give the public a desideratum, not to bind them to a particular mode of correspondence. Now, however, the Ottoman telegraph lags, and the Russian telegraph gains strength. As a rule, we are not using the latter yet; it has just given us a commercial message in Teheran in 72½ hours, while its rival cannot force on its burden in less than nine days. Here success may, perhaps, be spasmodic; but time will show. On the other hand, the failure is becoming chronic. Turkey must bestir herself, or the competition will be fatal to her. I say nothing of the difference of rates, except that the difference is favourable to traffic through Russia.”

49. It appears, however, according to a letter from Major Champain, dated the 10th April 1866, and addressed by him to W. J. Thornton, Esq., the Secretary of the Public Works Department in the India Office, that considerable improvement had then lately been made in working the lines in Turkey, but that owing to a heavy fall of snow in Persia, the working of the Persian lines had been very unsatisfactory.

50. Your Committee are of opinion that the cause of the complaints so generally and justly made as to the manner in which the telegraphic service between this country and India has been performed, as a rule, since the line by the Persian Gulf was opened for public traffic in February 1865, is to be found in the imperfect administration of the Turkish system, and the neglect of the authorities in India to make adequate provision for the distribution from Kurrachee of the immense amount of business in connection with Europe, which it might to have been foreseen would follow immediately upon the opening of the Persian Gulf line to the use of the public.

51. In the former case the imperfection of the service is not more than might have been expected on the first introduction of a method of communication so novel to the habits of business of the people of Turkey; but apart from natural adverse causes, such as the severity of the climate in the winter months in some districts

districts of the route through Asia Minor and Armenia, there is no reason to doubt that by strict compliance with the terms of the convention, in regard to the reservation of one wire at least for the purposes of messages to and from the eastward, the employment of an adequate number of European officers and signallers well acquainted with the English language, and careful attention to the condition of the line itself, the service may in time become satisfactory in its working.

Telegraphs in India.

52. There are now about 14,500 miles of Government telegraph lines in India, connecting the chief cities in the different Presidencies, and they are completed towards Singapore as far as Rangoon. They have been constructed at a cost amounting to 1,146,861 *l.* 14 *s.* 3 *d.* on 30th April 1864. There are besides, 3,141 miles of lines erected by the different railway companies, at a cost of 411,924 *l.* 12 *s.* 8 *d.* on 31st December 1864, and which are maintained at an expense of 41,888 *l.* 18 *s.* 5 *d.* per annum.

53. That the working of the Government lines of telegraph in India has been very unsatisfactory is admitted. Colonel Robinson, the Director General of the Indian Telegraph Department, has ascribed the defects in a great measure to the fact that the officers of the Department have been underpaid, their emoluments not been commensurate with those given in other establishments, and also to the circumstance that the lines, having been destroyed in the war times, had been re-erected in haste for military purposes, and since then had been gradually, but very slowly, reconstructed. Colonel Robinson is, however, of opinion that the working is much improved, and that merchants in Calcutta now receive their messages, even if sent in cypher, very accurately. He adds that, although the telegraph in India was originally established for the purposes of speedy communication between different military stations, it is now looked upon almost in the light of a post-office.

54. Your Committee were informed on the same authority, that efficacious measures have been taken for the establishment of a second line of wire, to connect Kurrachee with the internal system of India, and otherwise to redeem that part of the service from the reproach which has been cast upon it.

55. A suggestion was made in 1862 that the Government lines of telegraph should be made over to a private company for administration; but the Governor General in Council declined to acquiesce in the proposal.

56. With reference to the establishment of independent lines of telegraph by private companies, Lieutenant Colonel C. Douglas, lately the Officiating Director General of Telegraphs in India, in a letter addressed to the Indian Government in 1861, said—

“There are already several lines of telegraph in private hands; I allude to those of the several Railway Companies which have power to transmit private messages in all cases where the Government have no co-ordinate lines; should, however, other private companies desire to undertake telegraph management, there is no line which could be so conveniently made over to them as that connecting Calcutta with Rangoon, and the local lines in that province. These lines connecting three very important places of commerce, Calcutta, Akyab, and Rangoon, with the advantages of possible extension to the port of Moulmein, appear to hold out every prospect of being remunerative; and the fact of the telegraph lines in Pegu being very largely used in official correspondence, owing to the tardiness of postal communication, offers additional prospect of profit.”

57. In 1863, with a view to utilize as far as possible the heavy expenditure already referred to as having been incurred by the Railway Companies in India in establishing telegraphs by the side of their lines, it was proposed to lease them to a responsible Company then about to be formed, under the title of “The Oriental Telegraph Company,” for the purpose of carrying out a system of commercial telegraphs in India, and an application was made to the Secretary of State for India to sanction the arrangement; but for reasons which do not appear to your Committee to be very clear, an unfavourable answer was returned to the application.

Telegraph to China and Australia.

58. Proposals have been made at various times, to Her Majesty's Government, for the establishment of a telegraphic service to connect Australia with the Indian system at Rangoon, but no arrangement has as yet been found practicable, notwithstanding the willingness of the Colonies (as appears by the evidence of Sir C. Nicholson, Bart., formerly Speaker of the Legislative Council at Sydney), to contribute a guarantee to the extent of 35,000 *l.* per annum, towards securing an interest on the capital required for the purpose. The Government of Holland has expressed its readiness to afford material aid in the construction of a line which will bring their dependencies in the East into communication with Europe; whilst the French Government also is stated to be willing to assist in the formation of a line which will connect their establishments at Saigon with a main line at Singapore.

59. According to the best information attainable, neither the depths of water, nor the distances between one station and another, present any difficulty, as regards the construction of a line between Rangoon, Singapore, and the Australian Colonies.

Proposed New Service to India, by way of Egypt.

60. A scheme for an independent line of telegraph to India, to be continued hereafter to Australia and China, under the charge of English officials, and an undivided responsibility throughout, excepting in its passage through France, has been submitted to your Committee.

61. The intention of the promoters of this scheme is to form a Company for the transmission of messages, under one control and management, as far as may be practicable, between England, Egypt, India, China, and the Australian Colonies, by means of a line of wire, which passing through Italy (under a concession already granted by the Italian Government) to the Island of Sicily, will thence be carried to the African Coast, joining the existing Malta and Alexandria Cable at Benghazi, from whence, in order to convey the large through traffic that will then be concentrated on this line, a second or duplicate line will be laid to Alexandria. Under arrangements made with the "Telegraph to India Company," the new Company will acquire possession of their concession as well as their lines between Alexandria, Cairo, and Suez. From Alexandria two distinct lines will branch off to India: one proceeding from Suez to Cossier and Suakim on the western shore of the Red Sea, or by land lines up the Valley of the Nile, by permission of his Highness the Viceroy of Egypt, to Suakim or Massowah, and thence by submarine cables, *viâ* Aden and the southern coast of Arabia, to Kurrachee and Bombay. The other, or alternative line, will be the Syrian line from Gaza to Diarbekir already referred to. Arrangements will be made to secure independent wires between Bombay, Calcutta, and Rangoon, and to carry out (with concurrence of the Indian authorities in this country) the conditions of the agreement before mentioned, with the East Indian, the Great Peninsula, and other Indian Railway Companies, for placing separate commercial wires on their posts from Bombay to Calcutta, Madras, Allahabad, Benares, Delhi, &c. From Rangoon, the Eastern terminus of the Indian land lines, a cable will be laid to Singapore, whence submarine lines will diverge in two directions: one branch proceeding, *viâ* Saigon, to Hong Kong and Shanghai; and the other passing through Java to the Australian Colonies. With a view of embracing the entire system of telegraphy to the East, it is proposed to undertake, if approved by the Secretary of State for India in Council, and the Government of India, a lease of, and eventually to purchase on equitable terms, the Persian Gulf line, under such arrangements with the Ottoman Government as will secure to the public the same accuracy and rapidity in the transmission of messages as obtains by way of Egypt, thereby providing the public with a double or alternate route to all parts of the East.

62. As evidence favouring this proposition, your Committee refer to the testimony of several mercantile witnesses, and also of the Chairman of the Electric and International Telegraph Company, and the Chairman of the Submarine Telegraph Company, to the effect that, in the case of the constantly recurring irregularities in the transmission of messages through the Continent, the greatest difficulty

difficulty is met with in obtaining satisfactory redress, owing to the great number of different administrations through which they have to pass, and the impossibility, as is stated, of identifying the locality of the mistake.

RECOMMENDATIONS.

63. YOUR Committee having carefully considered the circumstances above stated, are of opinion,—

As regards the Postal Question.

1st. That, whilst it has not been expedient hitherto to add to the expense of the postal communications with India, by establishing a more frequent service to Bombay, in addition to the existing services to Madras and Calcutta, yet having regard to the facilities already afforded by the railways under construction in India, and to the prospect of the early completion of the main lines of communication connecting the Port of Bombay with the Presidencies of Calcutta and Madras, the North West Provinces, and the Punjab, the time has arrived when tenders should be invited for a weekly service to Bombay alone, and the separate postal service between this country and Madras and Calcutta should be discontinued.

2nd. That such service should be on the footing of an express service, entirely unconnected, to the eastward of Suez, with any other mail services.

3rd. That the tenders should be either for the entire service to and from Bombay, or for the sections to the east and west of Egypt separately, the parties having the option to tender for either weekly or fortnightly services.

4th. That the time table should be based on a prescribed speed of not less than 11 nautical miles per hour, on the voyage between Marseilles and Alexandria, and 10 miles per hour between Suez and Bombay; but that the tenders be required to state also terms in each case for higher rates of speed of not less than one additional half mile per hour.

5th. That in consideration of the outlay which must necessarily be incurred in the construction of new vessels, or adapting those now employed, for the efficient performance of the future service to India, it is expedient that the new contracts shall be for a term of years certain, subject to a subsequent notice of two years on either side.

6th. That Her Majesty's Government should take into their early consideration the arrangements to be made, in consequence of the proposed separation of the Indian service, for maintaining a fortnightly or half-monthly service to China, and a monthly or four-weekly service to Australia, having regard to any facilities which may be afforded by the monthly service to China now performed by the Messageries Impériales from Marseilles.

7th. That, in the opinion of your Committee, the arrangements under which India now defrays a moiety of the net cost of the China service, after deducting the postal receipts, will not, under the proposed arrangements, be equitable as regards that Government, and should be modified.

As regards the Telegraphic Question.

1st. That, having regard to the magnitude of the interests, political, commercial, and social, involved in the connection between this country and India, it is not expedient that the means of intercommunication by telegraph should be dependent upon any single line, or any single system of wires, in the hands of several foreign governments, and under several distinct responsibilities, however well such services may be conducted as a whole, in time of peace.

2nd. That the establishment of separate lines, entirely or partially independent of the present line through Turkey, is therefore desirable; and, in that view, that means should be taken for improving the condition and facilitating the use of the lines of telegraph which connect the Persian system with Europe, by way

of the Georgian lines of the Russian Government, and for bringing, if possible, within the Turkish convention the line recently established through Syria, for connecting Alexandria with the main line to India at Diarbekir.

3rd. That, with the view to better security against accident in time to come, the communication by way of the Persian Gulf should be doubled, either by the laying of a second submarine cable, or by continuing the land line from Kurrachee and Gwadel to Bunder Abbas, and thence, under arrangements with the Government of Persia, to Ispahan, by way of Kerman and Yezd.

4th. That a proposition made to your Committee for the establishment of a direct communication between Alexandria and Bombay, by way of Aden, on the principle of a line practically under one management and responsibility, between London and the Indian Presidencies in the first instance, and afterwards with China and the Australian Colonies, is deserving of serious consideration, and such reasonable support as the influence of Her Majesty's Government may be able to bring to its aid.

5th. That considering the great outlay of guaranteed railway capital already incurred in the establishment of the telegraph on the several lines of railway in India, it is expedient that means should be taken for affording the public the utmost benefit attainable from that expenditure, either by the Government of India sanctioning the use of the wires of the companies by a public company willing to rent the privilege on equitable terms, or by such an organization of the several independent companies as will establish an unity of system, and bring the use of the lines fairly within the reach of the public.

6th. That the magnitude of the interests involved in the trade of this country with China and Australia, and the rapidly increasing development of the colonies in population, in commerce, and in the various elements of national greatness, render it desirable that arrangements should be made to bring these communities within the reach of telegraphic communication with Europe.

20 *July* 1866.

PROCEEDINGS OF THE COMMITTEE.

Tuesday, 13th March 1866.

MEMBERS PRESENT:

Mr. Turner.
Sir Charles Bright.
Sir Henry Rawlinson.
Lord Stanley.
Mr. Crawford.

Mr. Schreiber.
Admiral Seymour.
Lord Robert Montagu.
Mr. Weguelin.

Mr. CRAWFORD was called to the Chair.

The Committee deliberated.

[Adjourned to Friday, 23rd March, at One o'clock.

Friday, 23rd March 1866.

MEMBERS PRESENT:

Mr. CRAWFORD, in the Chair.

Mr. Baillie.
Sir Charles Bright.
Mr. Laird.
Mr. Moffatt.

Lord Robert Montagu.
Mr. Schreiber.
Admiral Seymour.
Mr. Stansfeld.

Mr. *Frederic Hill*, Mr. *W. H. Thornton*, Mr. *Richard John Randall*, and Mr. *Richard Valpy*, were severally examined.

[Adjourned to Friday, 13th April, at Twelve o'clock.

Friday, 13th April 1866.

MEMBERS PRESENT:

Mr. CRAWFORD, in the Chair.

Mr. Childers.
Sir Charles Bright.
Admiral Seymour.
Lord Stanley.
Mr. Baillie.
Sir Henry Rawlinson.

Mr. Weguelin.
Mr. Laird.
Mr. Stansfeld.
Mr. Schreiber.
Mr. Turner.

Mr. *Thomas Taylor*, and Mr. *William Edwards*, were severally examined.

The Committee deliberated.

Mr. *Frederic Hill*, further examined.

Captain *James Rennie*, Mr. *Richard Randall*, and Mr. *Robert Knight*, were severally examined.

[Adjourned to Tuesday next, at Twelve o'clock.

Tuesday, 17th April 1866.

MEMBERS PRESENT :

Mr. CRAWFORD, in the Chair.

Mr. Turner.	Mr. Laird.
Sir Charles Bright.	Mr. Moffatt.
Mr. Ayrton,	Mr. Stansfeld.
Sir Henry Rawlinson.	Mr. Childers.
Admiral Seymour.	Mr. Weguelin.

Mr. Robert Grimston, Sir Macdonald Stephenson, Mr. Latimer Clarke, Sir James Carmichael, Mr. Henry Nelson, Mr. William Hamilton Craik, and Mr. Charles Shand, were severally examined.

[Adjourned to Friday next, at Twelve o'clock.

Friday, 20th April 1866.

MEMBERS PRESENT :

Mr. CRAWFORD, in the Chair.

Sir Charles Bright.	Mr. Turner.
Mr. Weguelin.	Mr. Laird.
Lord Robert Montagu.	Mr. Schreiber.
Mr. Moffatt.	Mr. Childers.
Admiral Seymour.	Mr. Ayrton.
Sir Henry Rawlinson.	

The Committee deliberated. Motion made and Question, "That the Chairman be instructed to move the House that the inquiry by this Committee be extended to China and Japan, Australia, and the Mauritius—(Mr. Moffatt)—put, and agreed to.

Mr. Patrick Campbell, Mr. Robert Gladstone, Mr. Gilbert M'Micking, Mr. Charles James Robinson, Mr. John Green, and Mr. Charles Wellington Howell, were severally examined.

Adjourned to Tuesday next, at Twelve o'clock.

Tuesday, 24th April 1866.

MEMBERS PRESENT :

Mr. CRAWFORD, in the Chair.

Mr. Ayrton.	Admiral Seymour.
Sir Charles Bright.	Sir Henry Rawlinson.
Mr. Childers.	Mr. Moffatt.
Lord Robert Montagu.	Mr. Weguelin.
Mr. Laird.	Mr. Stansfeld.
Mr. Marsh.	Mr. Turner.

Mr. C. W. Howell, further examined.

Mr. Richard Attwood Glasse, Mr. Henry Charles Forde, Mr. Fleming Jenkyn, and Mr. James Russell, were severally examined.

Sir James Carmichael, further examined.

[Adjourned to Friday next, at Twelve o'clock.

Friday, 27th April 1866.

MEMBERS PRESENT:

Mr. CRAWFORD, in the Chair.

Sir Charles Bright.	Mr. Weguelin.
Mr. Stansfeld.	Mr. Moffatt.
Lord Robert Montagu.	Mr. Turner.
Sir Henry Rawlinson.	Mr. Schreiber.
Admiral Seymour.	Mr. Childers.
Mr. Marsh.	Mr. Baillie.
Mr. Laird.	

Mr. *George W. Chetwynd*, Mr. *Henry Charles Forde*, Mr. *John Henry Greener*, Mr. *Henry Walton*, and Mr. *Charles Adley*, were severally examined.

[Adjourned to Tuesday, 8th May, at Twelve o'clock.

Tuesday, 8th May 1866.

MEMBERS PRESENT:

Mr. CRAWFORD, in the Chair.

Sir Charles Bright.	Admiral Seymour.
Mr. Marsh.	Mr. Childers.
Mr. Ayrton.	Mr. Laird.
Mr. Henry Baillie.	Mr. Moffatt.
Mr. Stansfeld.	Mr. Brooks.

Sir *Macdonald Stephenson* further examined; Mr. *Charles E. Stronge*, examined.

Mr. *Robert Knight*, further examined.

Mr. *Edmund D. Bourdillon* and Colonel *Richard Strachey*, were severally examined.

[Adjourned to Friday next, at Twelve o'clock.

Friday, 11th May 1866.

No Quorum formed.

[Committee to meet on Tuesday next, at Twelve o'clock.

Tuesday, 15th May 1866.

MEMBERS PRESENT:

Mr. CRAWFORD, in the Chair.

Admiral Seymour.	Mr. Stansfeld.
Mr. Ayrton.	Mr. Moffatt.
Mr. Marsh.	Mr. Weguelin.
Sir Charles Bright.	Sir Henry Rawlinson.
Mr. Brooks.	Mr. Turner.

Mr. *John Downing*, examined.

Colonel *Richard Strachey* and Mr. *William Thomas Thornton*, were severally further examined.

Colonel *Daniel George Robinson*, examined.

[Adjourned to Friday next, at Twelve o'clock.

Friday, 18th May 1866.

MEMBERS PRESENT :

Mr. CRAWFORD, in the Chair.

Sir Charles Bright.	Mr. Laird.
Sir Henry Rawlinson.	Mr. Weguelin.
Admiral Seymour.	Mr. Moffatt.
Mr. Marsh.	Mr. Brooks.
Mr. Stansfeld.	Mr. Childers.

Mr. *J. D. Samuda*, a Member of the House, examined.

Mr. *C. W. Howell* and Mr. *Robert Knight*, were severally further examined.

Mr. *H. J. Walton*, examined.

The Committee deliberated.

[Adjourned to Friday next, at Twelve o'clock.]

Friday, 25th May 1866.

MEMBERS PRESENT :

Mr. MOFFATT, in the Chair.

Admiral Seymour.	Mr. Stansfeld.
Mr. Marsh.	Mr. Baillie.
Mr. Brooks.	Mr. Childers.

Mr. *Charles Stronge*, further examined.

Sir *Charles Nicholson* and Mr. *Francis Gisborne*, were severally examined.

Mr. *C. W. Howell* and Mr. *Henry C. Forde*, were severally further examined.

Mr. *Charles William Siemans* and Mr. *Robert Brooks* (a Member of the Committee), were severally examined.

[Adjourned.]

Tuesday, 17th July 1866.

MEMBERS PRESENT :

Mr. CRAWFORD, in the Chair.

Sir Charles Bright.	Sir James Fergusson.
Mr. Childers.	Sir Henry Rawlinson.
Mr. Laird.	Mr. Schreiber.
Mr. Stansfeld.	

Mr. *Lewis Wells*, Colonel *Goldsmid*, and Mr. *Edward P. A. Thompson*, were severally examined.

Mr. *C. W. Howell*, further examined.

[Adjourned to Friday next, at Twelve o'clock.]

Friday, 20th July 1866.

MEMBERS PRESENT :

Mr. CRAWFORD, in the Chair.

Mr. Marsh.
Mr. Childers.
Sir Henry Rawlinson.
Sir Charles Bright.
Mr. Weguelin.

Mr. Moffatt.
Mr. Stansfeld.
Mr. Hunt.
Mr. Schreiber.
Mr. Laird.

Mr. *Frederick Hill* and Mr. *Edmund Bourdillon* were severally further examined.

Room cleared. The Committee deliberated.

Draft Report proposed by the Chairman read a first time, as follows :—

“ THE SELECT COMMITTEE appointed to inquire into the practical working of the present System of TELEGRAPHIC and POSTAL COMMUNICATIONS between this Country and the *East Indies, China, Mauritius, Australia, and Japan*;—HAVE considered the Matters to them referred, and have agreed to the following REPORT :—

“ 1. IT appears from a Table laid before your Committee by Mr. Valpy, of the Board of Trade, that the total value of imports into the United Kingdom, and of British produce exported therefrom, and total tonnage of vessels entered and cleared at ports in the United Kingdom, in the year 1865, were as follows :—

	£.
Value of Imports - - - - -	271,134,967
Value of Exports (British produce and manufacture) - -	165,862,402
Tonnage of Vessels :—	
Entered - - - - -	14,317,886
Cleared - - - - -	14,579,206

“ Of these quantities, British India, Singapore, Ceylon, Mauritius, China, China (Hong Kong), Egypt, the Dutch possessions in India (Java, Sumatra, &c.), the Phillippine Islands, Japan, and Australia, contributed the following proportions :—

C O U N T R I E S.	Imports.	Exports.	Tonnage of Vessels.	
			Entered.	Cleared.
	£.	£.	Tons.	Tons.
British India - - -	37,395,372	18,254,570	664,391	671,856
Singapore - - -	2,169,056	1,442,450	77,835	50,292
Ceylon - - -	3,707,615	685,308	52,197	50,400
Mauritius - - -	1,246,299	596,848	41,029	30,805
China - - -	10,673,960	3,609,301.	91,606	80,375
China (Hong Kong) - -	773,068	1,561,851	14,408	42,848
Egypt - - -	21,773,250	5,985,087	361,419	488,268
Dutch Possessions in India (Java, Sumatra, &c.) - }	226	928,642	Nil	29,349
Phillippine Islands - -	1,253,904	945,624	23,207	18,055
Japan - - -	614,743	1,520,895	9,361	19,602
Australia - - -	10,283,113	13,352,357	156,649	387,239
TOTAL for the above-named Countries - - - }	68,117,356	42,897,846	1,492,102	1,869,090

“ 2. It will thus be seen that upwards of 25 per cent. of the whole of the external commerce of the United Kingdom is transacted with the several countries above enumerated. The great importance of rapid and regular systems of communications between countries transacting business of such magnitude and importance can hardly, therefore, be over-rated.

“ 3. Many merchants, bankers, and others engaged in carrying on these vast operations, having complained of the insufficiency of the existing postal and telegraphic arrangements, your Committee have inquired into their allegations on both points, and carefully considered the circumstances in their several bearings.

“ AS REGARDS THE POSTAL SERVICE.

“ *Existing Postal Contracts.*

“ 4. The now subsisting contracts between Her Majesty's Government and the Peninsular and Oriental Steam Navigation Company for the conveyance of mails between England and India, Ceylon, Mauritius, China, and Australia, are four in number. The first contract under which the India and China mails are conveyed, is dated the 1st January 1853, and is now terminable at one year's notice. Under this contract the mails were to be conveyed twice each way in every calendar month, between England and Alexandria, *viâ* Southampton and Marseilles; and twice each way in every month between Suez, Calcutta, and Hong Kong. The vessels so employed were to be of not less than 1,100 tons burden, and were to maintain an average speed of not less than 10 knots an hour. The Company also engaged to carry mails between Singapore and Sydney, once each way, in every alternate month, in vessels of not less than 600 tons burden, which should maintain an average speed of 8½ knots an hour. The payment to the Company in respect of the India and China services was to be 199,600*l.*, with a proviso that it was to be reduced to 179,600*l.* per annum, six months after the opening of the railway across Egypt. In consequence of that proviso, and of certain other modifications which have since been introduced in the contract, the amount in respect of the services in question is reduced this year to 162,125*l.*, of which 86,567*l.* have been voted in Committee of Supply, leaving 75,558*l.* to be provided from other sources.

“ 5. By a contract, dated 7th July 1854, the mails were to be carried twice each way, every calendar month, between Bombay and Aden, in vessels of not less than 800 tons burden, and to maintain an average speed of 10 knots an hour. This service has since been extended from Aden to Suez. The payment to the Company in respect of these services was to be 24,700*l.* per annum; but only 22,000*l.* has been voted in Committee of Supply this year on account of them. This contract is also terminable at one year's notice.

“ 6. Besides the above-stated sums, 65,500*l.* have been voted for ‘additional services,’ making the entire vote of the present year, in respect of the India and China mail services, after deductions and contributions from other sources, 174,067*l.*

“ 7. The Australian mails are now carried under a contract, dated the 17th day of November 1865, between the Postmaster General and the Peninsular and Oriental Company. The Company undertake to convey the mails from Point de Galle, *viâ* King George's Sound and Melbourne, to Sydney in 516 hours; and from Sydney, *viâ* Melbourne and King George's Sound, to Point de Galle in 564 hours on the following conditions:

“ That a sum, after the rate of 120,000*l.* per annum, shall be paid to the Company so long as it shall, upon the requisition of the Postmaster General, cause to be performed one such voyage each way in every calendar month:

“ Or, a sum after the rate of 130,000*l.* per annum, if and so long as the said Company shall, upon the requisition of the Postmaster General, cause to be performed one such voyage each way in every lunar month of four weeks:

“ Or, a sum, after the rate of 170,000*l.* per annum, if and so long as the said Company shall, upon the requisition of the Postmaster General, cause to be performed two such voyages each way in every calendar month:

“ Or, a sum, after the rate of 184,166*l.* per annum, if and so long as the said Company shall, upon the requisition of the Postmaster General, cause to be performed two such voyages each way in every lunar month of four weeks.

“ The contract is to be terminable at 24 calendar months' notice. The sum to be asked in Committee of Supply in respect of this service is 59,750*l.*, being one moiety of the contract payment, after allowance of 500*l.* for discontinuance of Admiralty surveys.

“ 8. The Mauritius mails are carried under a contract dated the 16th day of April 1861, by which the above-mentioned Company undertook to convey mails once each way in every month between Suez and Mauritius, calling at the Seychelle Islands, for the purpose of landing and embarking mails on each of the homeward voyages, and on each of the outward voyages, except during the months of June, July, and August. The vessels so employed to be of not less than 850 tons burden, and to arrive and depart from Suez and Mauritius on certain days in each month, specified in a table inserted in the contract; but under a new contract, for a line between Mauritius and Point de Galle, entered into provisionally, the payment is reduced to 18,000*l.* The payment for such services was 30,000*l.* per annum, to be paid by the Colony. Notice has been given by the Company to terminate the contract, and the last voyage under it was to be made in the month of June last past.

“ 9. The mails to Japan are carried every fortnight in vessels belonging to the Peninsular and Oriental Company, but for so much of the service as lies between Shanghai and Japan no subsidy is paid. The Company are now claiming a subsidy, as there are seasons of the year when the services may be discontinued for commercial purposes.

“ 10. By

"10. By an agreement made between the above-named Company and the Postmaster General, dated the 27th February 1866, amongst other matters to which it is not necessary to refer, it was agreed that instead of the mails between England, India, and China, being carried at a nominal average speed of 10 knots an hour, according to the contracts of 1st January 1853, and 7th July 1854, they shall henceforth be conveyed between the several ports in a certain number of hours, the practical effect of the arrangement being to reduce the rate of speed on a large proportion of the distance to $9\frac{1}{2}$ knots an hour.

"11. The Peninsular and Oriental Company possess a fleet of 57 steam-vessels, of the aggregate tonnage of 84,176 tons, and of 19,230 horse power. Your Committee are of opinion that the services under the several contracts to which reference has been made have been well performed, and the Assistant Secretary of the Post Office stated that no mail was ever lost that was conveyed by this Company.

"Bombay the Port for Indian Mails.

"12. When the contract was made, in 1853, for the conveyance of the mails by sea to Madras and Calcutta, such an arrangement was due to the political and commercial importance of those cities, and was also the most convenient method that could then have been adopted as regarded the distribution of letters in India; but circumstances have since happened which render a reconsideration and rearrangement of the postal service between this country and India a matter of urgent necessity.

"13. Mr. Riddell, the Director General of the Post Office of India, addressed a letter to the Secretary to the Government of India, on the 24th April 1860, in which he called attention to the fact that the contract with the Peninsular and Oriental Company would expire in the following year, and mentioned some of the inconveniences which occurred under the existing system. He said: 'At present four mails are despatched from England and from India every month, two from and to Bombay, and two from and to Calcutta. According to the time table, 35 days are occupied between London and Calcutta, *viâ* Marseilles; 24 days between London and Bombay. The mail of the 10th January should reach Calcutta on the 13th February, while that of the 18th January should reach Bombay on the 10th February. It is clear that all places within three days post of Bombay would receive the mail of the 18th January, *viâ* Bombay, before the mail of the 10th January reached Calcutta. At a place situated at Benares, the mail of the 10th January, *viâ* Calcutta, would be delivered on the morning of the 16th February. A mail of the same date, if sent *viâ* Bombay, would reach Bombay on the 2d February, and be delivered at Benares on the 7th or 8th February. The mail which left London on the 18th January, *viâ* Bombay, would be delivered at Benares on the 15th or 16th February, at the same time or before the mail of the 10th January arrived, *viâ* Calcutta. Benares is about 1,000 miles from Bombay, and 422 miles from Calcutta.

"The mail which left London on the 10th January is due at Calcutta on the 13th February; if it were sent *viâ* Bombay, it would be due at Bombay on the 2nd February, and according to present rates of speed, and even with the existing means of transport, the letters would all be delivered in Calcutta on the 9th or 10th, and all Southampton newspapers by the 12th or 13th.'

"The case as regards Madras is similar. The mail leaving London on the 10th January is due at Madras, *viâ* Galle, on the 9th February; if sent by Bombay, it would be due on the 6th February, having reached Bombay on the 2nd idem.'

"14. Since the date of the above letter, great progress has been made in the completion of the railway system in India. It appears from the evidence of the officers of the East Indian, the Great Indian Peninsula, and the Madras Railway Companies, that in the Spring of 1868 there will be continuous railway communication between Bombay, Calcutta, and the North Western Provinces of India; and that Madras also will be connected with Bombay by railway in July 1869.

"15. In a despatch addressed to the Secretary of State for India on the 23rd November 1865, by the Governor General in Council of India, it was stated that, 'The Nagpore extension of the Great Indian Peninsula Railway will be opened to Wurdah, within 60 miles of Nagpore, in January next, and will be completed to Nagpore, it is believed, in January 1867. Between Nagpore and Mirzapore, the whole distance can be traversed by mail carts throughout the year. Even now it will be seen from the dates for closing the mails, the mails *viâ* Galle have become, for letters, quite useless. The mail which left Calcutta this morning by the Galle route is due in London on or about the 27th proximo, while the mail which closes this evening for the Bombay route, and by which this despatch will be transmitted, should, it is believed, reach London on or about the 21st.'

"16. That Bombay should be the port for arrival and departure of mails between this country and India, is the opinion of Her Majesty's Postmaster General. In a letter dated 14th July 1865, written by the Assistant Secretary of the Post Office to Mr. Merivale at the India Office, it was said, 'The Postmaster General fully agrees with Sir C. Wood and the Government of India, in the opinion expressed in your letter, of the advantage of substituting for the present postal service with India a weekly service, and in thinking that such service should be exclusively with Bombay.' And Mr. Hill also informed

your Committee that letters sent to Bombay would arrive at the best possible point in India, for their speedy distribution, and that the gain to the public would be very great indeed.

“As to Weekly Mail to India.”

“17. Mr. Riddell, in his letter to the Government of India of the 24th April 1860, having strongly recommended the establishment of a weekly mail, *viâ* Bombay, the Governor General in Council, in sending that letter to the Home Government, said, ‘In forwarding the Director General’s letter for consideration of Her Majesty’s Government, we beg to express our concurrence in his views of the expediency of providing, as soon as possible, for a weekly postal communication with Bombay, whereby the whole of India would receive letters by every mail. At present only a very small part of India has the benefit of four mails in the month, the whole of the North Western Provinces, the Punjab, Scinde, and Bombay, and a great portion of the Madras Presidency receiving no benefit whatever from the two mails which are sent *viâ* Galle.’

“18. The Assistant Secretary to the Post Office stated to your Committee that the Post Office had long desired to see a weekly mail established. That it would be much more convenient to them, and, what they regarded with greater interest, that they believed it would be very advantageous to the two countries.

“19. In January 1865, a memorial, signed by most of the principal merchants and bankers in London, engaged in commercial and monetary transactions with India, was presented to the Postmaster General, praying that a weekly mail might be established between London and Bombay, to leave London on Friday in every week. The East India and China Association of Liverpool, the merchants and bankers of Madras, the Bombay Chamber of Commerce, and the Bengal Chamber of Commerce also approved of such an arrangement.

“20. The Assistant Secretary to the Post Office stated to your Committee that the charge of carrying the mails is considered at the Post Office from a profit and loss point of view. That the present loss on the Indian service amounts to 48,000*l.* a year, and on the China service to 34,000*l.*, a total loss of 82,000*l.*, the half of which is borne by the Indian Government. He estimates that by sending 52 mails a year each way, between London and Bombay, instead of 24 mails each way between London and Bombay, and 24 mails each way between London and Calcutta, an additional expense would be incurred, amounting to about 30,000*l.* a year; and Mr. Hill had previously stated that the weekly mail might have been established, if the Indian Government would have consented to allow an extra charge of 6*d.* on all letters which now pay 6*d.* and 10*d.*; but that the Indian Government having declined to concur in the expediency of such an increase in the rates of postage, whatever additional expense might be entailed by the establishment of a weekly mail to Bombay, must be borne exclusively by that Government.

“21. Your Committee cannot assent to the doctrine, that interests so important from every point of view, whether political, social, or commercial, as those which connect the United Kingdom with one of the largest and most valuable possessions of the Crown, should be prejudiced by an insufficient postal service, because the establishment of an efficient service might leave an apparent loss of no great magnitude to be borne by the two countries. They submit that a question of profit or loss, within reasonable bounds, is a consideration entitled to little weight in the case of so important a postal service as that between England and India. They concur in the views expressed on this subject, in a letter addressed by the India Office to the Assistant Secretary to the Post Office, on the 5th October 1865, in which it was said, ‘Sir Charles Wood cannot, however, regard the question as one merely affecting the charge on the Imperial revenues. It has been the perception of the bearing of increased postal communication on the wealth and progress of a country that has induced Statesmen of late years to consent to fiscal sacrifices for the purpose of obtaining it. There can be no doubt that increased postal communication with India implies increased relations with that country, increased commerce, increased investment of English capital, increased settlement of energetic middle-class Englishmen; and from all these sources the wealth and prosperity of England are more greatly increased than that of India.’

“22. It appears from a despatch from the Governor General in Council of India to the Secretary of State for India, dated the 22d February 1866, that the Indian Government is willing to forward the establishment of a weekly mail, by accepting the responsibility of any loss that may thereby be incurred. In offering, however, to incur such risk, it points out the unfairness of such an arrangement in the following terms: ‘But we do not consider such an arrangement to be altogether unobjectionable. It would apparently be based on the explanation that the service must be carried on at a loss, and if so, we venture to suggest that it would hardly be desired by England that the whole of that loss should fall upon the Indian revenue.’

“‘It has been well pointed out, in Mr. Merivale’s letter to the Post Office of the 5th October, that the interests of England and India are jointly concerned in this matter. There can be no doubt thousands in the former country, to whom increased facilities for postal

‘postal communication with India are just as important as they are to their countrymen living in India, and whether we look to the interest of this latter class only, or to the millions from whom Indian revenue is mainly drawn, and who have no direct interest in the matter at all, it would scarcely be generous for England to stipulate that the loss which might arise from the establishment of a proper and efficient postal service between the two countries should be borne wholly by the Indian taxpayer.’

“ Separate Service to India.

“23. It has long been a source of dissatisfaction to the Indian public, as well as to the Government, that, from being associated with the China postal service from this country, the Indian Government has been made to contribute one-half of the loss incurred in that service.

“24. The principle upon which such charge was imposed on the Indian revenue was stated in a Treasury Minute, dated the 21st August 1854, and will be found in the evidence of the Assistant Secretary to the Post Office. It says, ‘That so far as the commercial and political relations with China went, the latter existing exclusively for the former, it was laid down that the interests of England and India were equal.’

“25. The Court of Directors of the East India Company by no means acquiesced in the propriety and justice of this statement. In a letter addressed by their Deputy Secretary to Sir J. N. Redington, K. C. B., on the 7th September 1854, it was said: ‘The Court are unable to admit the validity of the reasoning upon which the Lords of the Treasury appear to base their opinion, that the interests of this country and of India are equal as respects some portions of these contracts. Whilst the Court are far from under estimating the importance to India of the trade with China, they cannot refrain from adverting to the facts, that the Indian trade with China is now carried on principally by British shipping, and that, by the commercial and fiscal policy of England, the manufactures of India, which had been superseded in India itself by those of the United Kingdom, have been in like manner driven out of China. The Court think that upon reconsideration, and a reference to these points, the Lords of Her Majesty’s Treasury will admit that the value of steam communication with China is far greater to the people of Great Britain than it is to the people of India.’

“26. In the despatch from the Governor General in Council of India, dated the 22nd February 1866, addressed to the Secretary of State for India, a protest is urged against the Indian revenue being in any way chargeable with the loss incurred on the China service between England and Galle. It is said, ‘If it is admitted, as it is by the Postmaster General in England (and the point is too clear to leave any room for question about it), that the postal service with India should in future be exclusively to Bombay, it is difficult to understand upon what ground it can be seriously maintained that the Indian Post Office should continue to be charged with a portion of the cost of a postal subsidy given to steamers on the line between Suez and Galle, for the conveyance of China and Australian mails, or why any subsidy should be given to steamers running between Galle and Calcutta.’

“ Speed of Mail Packets.

“27. The Indian public have long complained of the low rate of speed attained by the vessels which convey the mails to and from England to India, and it was stated to your Committee, by a witness of great experience (J. D’Aguilar Samuda, Esq., a Member of this House), that in the present state of nautical science the contract speed of 9½ knots an hour for the service between Suez and India is too low. That the contract speed obtained by the West India Mail Company is 10½ knots an hour. That with some modifications the vessels now employed by the Peninsular and Oriental Company could be made to attain a knot an hour more than they now make, but he is of opinion that in order to insure a satisfactory rate of speed, vessels of not less than 2,000 tons burden should be employed.

“28. The present contract time between London and Bombay is 24 days. In a letter addressed to the Director General of the Post Office of India, by Messrs. Stearns, Hobart, & Co., managers of the Bombay and Bengal Steamship Company, Limited, after naming the sum for which they would undertake a fortnightly mail service each way, between Bombay and Suez, at an average speed of 8 knots an hour, they said, ‘It may not be out of place to mention, although not as part of our tender, that we have in contemplation the building of a class of boats, not only larger and faster, but in every way superior to any now in the East, and capable of delivering the mails within 20 days between England and India, and plans for placing these vessels on the route are so far matured that should the tender we have made be accepted, and a reasonable prospect held out of our securing a fair subsidy through to England, we have little doubt of our being in a position to carry the project into immediate execution.’

“29. It is only fair to the Peninsular and Oriental Company to say that they have been, and still are, endeavouring to accomplish a better rate of speed. Mr. Howell, the secretary of the company, stated that their ships had not come up to their own expectations and wishes upon the Bombay line. Some vessels which were placed upon the line,

have not altogether fulfilled the expectations held out of them. They had sought to produce a great improvement in the consumption of coal, and also an increase of speed, but had been to some extent disappointed in that, but alterations in those vessels are going on.

“ The Australian and China Mails.

“ 30. As the separation of the Indian postal service from those mails which now proceed to Point de Galle will necessitate the reconstruction of the China service, your Committee invite attention to the efficient service between Europe and China every calendar month, performed by the Messageries Impériales from Marseilles.

“ The Italian Route.

“ 31. Your Committee have taken evidence to ascertain whether the Indian mails could be carried with advantage to the public over the Mont Cenis Railway, and through Italy to Brindisi, or some Italian Port, instead of through France to Marseilles, but they are not able to recommend that any steps should at present be taken to accomplish that object.

“ AS REGARDS THE TELEGRAPH SERVICE.

“ 32. The political and commercial importance of possessing permanent means of communication with the several countries before referred to, by a telegraphic service at all times available, and to be depended upon, is even greater in degree than the necessity for an efficient postal service; indeed, with regard to the bulk of commercial transactions between the merchants and manufacturers of this country, and producers and consumers abroad, the Post Office has now become, in a great measure, subsidiary to the telegraph. Nor are the benefits derived from telegraphic communication confined to the mercantile community alone; the public in general are equally interested in the rapid transmission of authentic mercantile intelligence; for, if the effect be, as has been stated by witnesses of authority, to enable merchants and manufacturers to obtain with greater certainty and economy a regular and adequate supply of the commodities they require in the English market, it is the consumer in the end to whom the ultimate advantage is brought home by the process of competition.

“ The Telegraph to India.

“ 33. The Indian and Home Governments have long been sensible of the extreme importance of possessing an efficient telegraph service between England and India, and have made great efforts and pecuniary sacrifices to obtain it; and if a full measure of success has not yet attended their exertions, the imperfections now complained of have arisen in a considerable degree from difficulties hitherto beyond their control.

“ 34. A message intended for India is delivered to one of the two Companies in London having telegraphic communication with the Continent, ‘ The Electric and International Telegraph Company,’ and ‘ The Submarine Telegraph Company,’ and is forwarded by one of two principal alternative routes, the Turkish or the Russian route. To reach Constantinople the lines principally used are through Vienna or Turin. From Vienna messages are transmitted to their destination chiefly through Servia, and occasionally through Wallachia. From Turin they proceed by the Italian coast line, and the sub-marine cable, across the Lower Adriatic, and arrive at Constantinople by way of Salonica, and the shores of the Sea of Marmora. A telegram may, therefore, be dealt with by French, Belgian, Dutch, Prussian, Austrian, Bavarian, Minor German, Italian, Servian, or Wallachian administrations. After the message reaches Constantinople, it is forwarded under the terms of the ‘ Indo-Ottoman ’ Convention, by an exclusive wire to Bagdad, and thence, either to Fao, at the head of the Persian Gulf, where it is received by British officers for despatch to Kurrachee by the Persian Gulf line, or, as an alternative, over the internal Persian system, by way of Teheran, Ispahan, and Shiraz to Bushire, where it again falls in with the main line. From Fao to Kurrachee, and from Bushire to Kurrachee, the line is exclusively under the control of the Government of India. This line is submarine, with an alternative land line between Gwadel, on the Meckran coast, and Kurrachee, and with the exception of two or three interruptions in traffic, owing to temporary breaks in the cable, is shown to work admirably well.

“ 35. A telegram by the Russian route proceeds *via* the Hague to Berlin, and from thence crosses the Russian frontier, passing through Mysolowitz to Tiflis in Georgia, and from that place over the Persian system above described to Bushire. It must, therefore, be resorted to through the agency of the Dutch, Prussian, Russian, and Persian administrations, before it reaches any officer who is responsible to the British Government.

“ 36. There is, therefore, an alternative route to India as far as the head of the Persian Gulf; but, in the case of an accident to the submarine cable to Kurrachee, all telegraphic communication with India must necessarily be interrupted.

“ 37. From

“ 37. From the returns for the month of January last, it appears that the messages between this country and India took the following routes to and from Constantinople :—

	Outward.	Homeward.
<i>Viâ</i> the Hague, Berlin, Vienna, Belgrade and Nissa (in Servia) - - - - -	64 per cent.	54 per cent.
<i>Viâ</i> the Hague, Berlin, Vienna, Bucharest, and Varna - - - - -	3 per cent.	44 per cent.
<i>Viâ</i> Paris, Turin, Valona, and Salonica - - - - -	29 per cent.	2 per cent.
Not specified - - - - -	4 per cent.	—
	100 per cent.	100 per cent.

“ 38. The whole of the service is well described in a despatch, No. 279, addressed at Constantinople, on the 12th April last, by Major John A. Champain, R. E., of the Indo-European Telegraph Department, to Mr. Thornton, of the India Office, copy of which will be found at length in the Appendix.

“ 39. The messages are forwarded to Constantinople by the telegraphic office on the Continent to which they have been addressed from London, by the route most convenient at the time; in some instances, and not unfrequently, they have been forwarded by way of Russia, to the great disadvantage of the parties interested in the speedy and correct transmission of the message.

“ 40. The number of messages which passed over the Persian Gulf line, from its opening in February 1865 to the end of the year, appears to have been as follows :

Eastward:			£.	s.	d.
<i>Viâ</i> Turkey and Fao - - - - -	9,175	} Earning	37,841	10	-
<i>Viâ</i> Bushire (Persian line) - - - - -	3,362				
Westward:					
<i>Viâ</i> Fao and Turkey - - - - -	7,552	} "	31,929	5	-
<i>Viâ</i> Bushire (Persian line) - - - - -	1,894				
TOTAL - - - - -	21,983		69,770	15	-

or, on the average, 3*l.* 3*s.* 5*d.* per message.

“ 41. During the months of January, February, March, and April of the present year, the total number of messages so carried is stated to have been (without distinction as to other routes in connexion) 10,995, earning 34,590 *l.* 10*s.*, or, on the average 3*l.* 2*s.* 11*d.* per message.

“ 42. Your Committee have been unable to ascertain the cost of the Persian Gulf line, but the working expenses are stated by Major Champain to amount to about 2,000*l.* per mensem, independently of the cost of refectons.

“ 43. The sum of 5*l.* 1*s.* is charged in all cases for a message not exceeding 20 words. Out of that sum about is retained by the Electric and International Company, and by the Submarine Company, the balance in each case being paid over to the authorities of the continental system to whose care it is committed. They account in like manner to their successors in the chain of communication until the Persian Gulf line is reached, in respect of which the Government of India receives 2*l.* 10*s.* for the transmission of the message from Fao, and 2*l.* from Bushire to Kurrachee, with 9*s.* additional for its distribution in India.

“ 44. Under a system such as this, where no continuous responsibility exists, much difficulty is necessarily experienced in tracing where the numerous delays and imperfections in the rendering of messages, of which so many complaints have been made, have taken place; and in very few instances have the public been successful in obtaining compensation for the disappointments they have met with.

“ 45. The service under Russian control is stated to be working with regularity, the messages reaching Tabreez occasionally in the space of 12 hours. The ill success which has hitherto attended the transmission of messages to India by this route is attributed to the imperfect management of the Persian service between Julpha on the Georgian frontier and Teheran; the exceeding rigour of the climate also during the winter months, especially on the line between Ispahan and Bushire, has presented many obstacles during the last winter.

“ 46. A proposition has been submitted to your Committee for the establishment of an alternative line connecting Bunder Abbas, in the lower part of the Persian Gulf, with Ispahan, by way of Kerman and Yezd. This line, if practicable, with reference to political considerations, would present many advantages.

"47. Lastly, a line constructed by the Turkish Government between Gaza, on the Egyptian frontier, and Diarbekir, on the main line of telegraph between Constantinople and Bagdad, has recently been opened for public traffic in connexion with the Malta and Alexandria line. This line may present many recommendations as an additional useful alternative line in the event of interruption to the direct lines to Constantinople through the continent of Europe; but at present it cannot be said to be available to the public generally, in consequence of the refusal of the Turkish authorities to receive messages of origin or destination, otherwise than Egyptian, for transmission by the line.

"48. With respect to the service through Turkey, there is a general concurrence of testimony that, as a rule, it is very defective. In a letter addressed to the Under Secretary of State for India by Major Champain, on the 31st August 1865, it was stated, 'There is no doubt that the messages to and from India are necessarily and vexatiously delayed, and public confidence in the undertaking is being shaken. The organization of the Turkish lines is defective, and, in my opinion, will continue so unless some decided step, such as the establishment of an opposition route, be taken. Mr. Courtenay invariably writes that either the Turkish Asiatic or the Turkish European lines are working badly, and it does not seem that Colonel Goldsmid's suggestions have yet been complied with. I know that the insulators we proposed for the new wires between Constantinople and Diarbekir were rejected as too expensive, and cheap inferior wires were ordered from Belgium. In some measure, however, I can account for delays of late in consequence of the cholera panic, which frightened the telegraph clerks from their posts. Still I maintain that blame is due to the Turks, and I much fear that they are really unable to work up to our standard of efficiency. Mr. Walton, the director of the cable, writes to me that "our messages from Kurrachee to Fao, and *vice versâ*, average 74 minutes for the last three months, and that the Bagdad men report 70 or 80 messages on hand, send 12 or 15, and then smoke hookahs, or say their prayers, for two or three hours, during which time Fao hears nothing of them." Our cable, therefore, is working admirably; for months past there has been no interruption on the Persian line, and yet all our endeavours are nullified by the bad arrangements in Turkey. On the other hand, the Russians are naturally anxious to help our through communication, and have now offered to place their line, from St. Petersburg to the Persian frontier, entirely in the hands of a well-known London firm. Mr. Siemans, the head of that firm, spoke to me lately on that subject, and would, I believe, be willing to accept the offer, if there were any probability of his obtaining the control of the Persian line, from the Tabreez frontier to our telegraphic centre at Teheran. I am convinced that, supported by Russian influence in Persia, and not opposed by us, he would succeed; and then we should, without having taken any active steps in the matter, obtain a second, and a really reliable line of communication between England and the Persian Gulf. Such an arrangement would also do more to render the Constantinople line efficient than remonstrances we may make, now the Turks know that we are entirely dependent on them.

"49. In Colonel Goldsmid's report of the 4th November 1865, it is stated, 'I see no remedy for the state of telegraphic correspondence in Turkey but associating Englishmen with the native employés in the higher as in the inferior duties of the line, making at once the principal stations "Anglo-Ottoman," as at Fao; or else giving the whole line to a company or firm competent to work and supervise it; such, for instance, as Messrs. Bright and Clark, who have, moreover, a kind of vested interest in the cable from old association. The first of these remedies I had the honour of suggesting to the Home Government in May, but the question involved political considerations, and the re-opening of or supplementing a lately ratified convention, one intended to be final. There is manifestly no better chance at this moment available for successful telegraphy in Turkey than competition. We have a convention with Turkey to enable us to keep open telegraphic communication with India through her dominions. She has gone to expense and taken pains to carry out the terms of this convention. We are therefore desirous to avail ourselves of her lines as much as possible. It is found, however, in practice, that the Turkish route is more or less a failure. Turkey has not earned the whole blame, but she certainly earned the lion's share. Our companies (that is, the British public by their agents) learn that an opposition line is available through Russia. They take supposed advantage of this eagerly to transmit hundreds of telegrams, but the rush was premature. The Russian line had not then reached good working order. They revert again to Turkey, but not in regard to conventions. The convention was to give the public a desideratum, not to bind them to a particular mode of correspondence. Now, however, the Ottoman telegraph lags, and the Russian telegraph gains strength. As a rule we are not using the latter yet; it has just given us a commercial message in Teheran in 72½ hours, while its rival cannot force on its burden in less than nine days. Here success may, perhaps, be spasmodic; but time will show. On the other hand, the failure is becoming chronic. Turkey must bestir herself, or the competition will be fatal to her. I say nothing of the difference of rates, except that the difference is favourable to traffic through Russia.'

"50. It appears, however, according to a letter from Major Champain, dated the 10th April 1866, and addressed by him to W. J. Thornton, Esq., the Secretary of the Public Works Department in the India Office, that considerable improvement had then lately been

been made in working the lines in Turkey, but that owing to a heavy fall of snow in Persia the working of the Persian lines had been very unsatisfactory.

“ 51. Your Committee are of opinion that the cause of the complaints so generally and justly made as to the manner in which the telegraphic service between this country and India has been performed, as a rule, since the line by the Persian Gulf was opened for public traffic in February 1865, is to be found in the imperfect administration of the Turkish system, and the culpable negligence of the authorities in India in making no adequate provision for the distribution from Kurrachee of the immense amount of business in connection with Europe, which it ought to have been foreseen would follow immediately upon the opening of the Persian Gulf line to the use of the public.

“ 52. In the former case the imperfection of the service is not more than might have been expected on the first introduction of a method of communication so novel to the habits of business of the people of Turkey; but apart from natural adverse causes, such as the severity of the climate in the winter months in some districts of the route through Asia Minor and Armenia, there is no reason to doubt that by strict compliance with the terms of the convention, in regard to the reservation of one wire at least for the purposes of messages to and from the eastward, the employment of an adequate number of European officers, and careful attention to the condition of the line itself, the service may in time become satisfactory in its working.

“Telegraphs in India.

“ 53. There are now about 14,500 miles of Government telegraph lines in India, connecting the chief cities in the different Presidencies, and they are completed towards Singapore as far as Rangoon. They have been constructed at a cost amounting to 1,146,861*l.* 14*s.* 3*d.* on the 30th April 1864. There are besides, 3,141 miles of lines erected by the different railway companies, at a cost of 411,924*l.* 12*s.* 8*d.*, on 31st December 1864, and which are maintained at an expense of 41,888*l.* 18*s.* 5*d.* per annum.

“ 54. That the working of the Government lines of telegraph in India has been very unsatisfactory is admitted. Colonel Robinson, the Director General of the Indian Telegraph Department, has ascribed the defects, in a great measure, to the fact that the officers of the Department have been underpaid, their emoluments not been commensurate with those given in other establishments, and also to the circumstance that the lines, having been destroyed in the war times, had been re-erected in haste for military purposes, and since then had been gradually, but very slowly, reconstructed. Colonel Robinson is, however, of opinion that the working is much improved, and that merchants in Calcutta now receive their messages, even if sent in cypher, very accurately. He adds that, although the telegraph in India was originally established for the purposes of speedy communication between different military stations, it is now looked upon almost in the light of a post-office.

“ 55. Your Committee were informed on the same authority, that efficacious measures have been taken for the establishment of a second line of wire to connect Kurrachee with the internal system of India, and otherwise to redeem that part of the service from the reproach which has been cast upon it.

“ 56. A suggestion was made in 1862 that the Government lines of telegraph should be made over to a private company for administration; but the Governor General in Council declined to acquiesce in the proposal.”

“ 57. Your Committee are not aware that any objection is entertained by either the Home or Indian Government to the establishment in India of independent lines of telegraph by private companies, and official opinion has been expressed that it is desirable to place the railway telegraphs in the hands of a separate company. It appears also that as regards a portion of the Government lines, Lieutenant Col. C. Douglas, lately the officiating Director General of Telegraphs in India, in a letter addressed to the Indian Government in 1861, said—

“ ‘ There are already several lines of telegraph in private hands; I allude to those of the several Railway Companies which have power to transmit private messages in all cases where the Government have no co-ordinate lines; should, however, other private companies desire to undertake telegraph management, there is no line which could be so conveniently made over to them as that connecting Calcutta with Rangoon, and the local lines in that province. These lines connecting three very important places of commerce, Calcutta, Akyab, and Rangoon, with the advantages of possible extension to the port of Moulmein, appear to hold out every prospect of being remunerative; and the fact of the telegraph lines in Pegu being very largely used in official correspondence, owing to the tardiness of postal communication, offers additional prospect of profit.’ ”

“ 58. In 1863, with a view to utilise, as far as possible, the heavy expenditure already referred to as having been incurred by the Railway Companies in India in establishing telegraphs by the side of their lines, it was proposed to lease them to a responsible Com-

pany then about to be formed, under the title of 'The Oriental Telegraph Company,' for the purpose of carrying out a system of commercial telegraphs in India, and an application was made to the Secretary of State for India to sanction the arrangement; for reasons which do not appear to your Committee to be very clear, an unfavourable answer was returned to the application; it appears, however, that no objection is now entertained in India to the employment of a public Company in the manner proposed upon any grounds of political expediency or otherwise.

"Telegraph to China and Australia.

"59. Proposals have been made at various times to Her Majesty's Government for the establishment of a telegraphic service to connect Australia with the Indian system at Rangoon, but no arrangement has as yet been found practicable, notwithstanding the willingness of the Colonies (as appears by the evidence of Sir C. Nicholson, Bart., formerly Speaker of the Legislative Council at Sydney) to contribute a guarantee to the extent of 35,000*l.* per annum, towards securing an interest on the capital required for the purpose. The Government of Holland has expressed its readiness to afford material aid in the construction of a line which will bring their dependencies in the East into communication with Europe; whilst the French Government also is stated to be willing to assist in the formation of a line which will connect their establishments at Saigon with a main line at Singapore.

"60. According to the best information attainable, neither the depths of water nor the distances between one station and another, present any difficulty, as regards the construction of a line between Rangoon, Singapore, and the Australian Colonies.

"Proposed New Service to India by way of Egypt.

"61. A scheme for an independent line of telegraph to India, to be continued hereafter to Australia and China, under the charge of English officials, and an undivided responsibility throughout, excepting in its passage through France, has been submitted to your Committee.

"62. The intention of the promoters of this scheme is to form a Company for the transmission of messages, under one control and management, as far as may be practicable, between England, Egypt, India, China, and the Australian Colonies, by means of a line of wire, which passes through Italy (under a concession already granted by the Italian Government) to the Island of Sicily, will thence be carried to the African Coast, joining the existing Malta and Alexandria Cable at Benghazi, from whence, in order to convey the large through traffic that will then be concentrated on this line, a second or duplicate line will be laid to Alexandria. Under arrangements made with the 'Telegraph to India Company,' the new Company will acquire possession of their concession as well as their lines between Alexandria, Cairo, and Suez. From Alexandria two distinct lines will branch off to India: one proceeding from Suez to Cossier and Suakim on the western shore of the Red Sea, or by land lines up the Valley of the Nile, by permission of his Highness the Viceroy of Egypt, to Suakim or Massowah, and thence by submarine cables, *via* Aden and the southern coast of Arabia, to Kurrachee and Bombay. The other, or alternative line, will be the Syrian line from Gaza to Diarbekir already referred to. Arrangements will be made to secure independent wires between Bombay, Calcutta, and Rangoon, and to carry out (with concurrence of the Indian authorities in this country) the conditions of the agreement before mentioned, with the East Indian, the Great Peninsula, and other Indian Railway Companies, for placing separate commercial wires on their posts from Bombay to Calcutta, Madras, Allahabad, Benares, Delhi, &c., from Rangoon, the Eastern terminus of the Indian land lines, a cable will be laid to Singapore, whence submarine lines will diverge in two directions; one branch proceeding, *via* Saigon, to Hong Kong and Shanghai; and the other passing through Java to the Australian Colonies. With a view of embracing the entire system of telegraphy to the East, it is proposed to undertake, if approved by the Secretary of State for India in Council, and the Government of India, a lease of, and eventually to purchase on equitable terms, the Persian Gulf line, under such arrangements with the Ottoman Government as will secure to the public the same accuracy and rapidity in the transmission of messages as obtains by way of Egypt, thereby providing the public with a double or alternate route to all parts of the East.

"63. As evidence favouring this proposition, your Committee refer to the testimony of several mercantile witnesses, and also of the Chairman of the Electric and International Telegraph Company, and the Chairman of the Submarine Telegraph Company, to the effect, that in the case of the constantly recurring irregularities in the transmission of messages through the Continent, the greatest difficulty is met with in obtaining satisfactory redress, owing to the great number of different administrations through which they have to pass, and the impossibility, as is stated, of identifying the locality of the mistake.

"RECOMMENDATIONS.

" 64. YOUR Committee having carefully considered the circumstances above stated, are of opinion,—

" As regards the Postal Question.

" 1st. That, whilst it has not been expedient hitherto to add to the expense of the postal communications with India, by establishing a more frequent service to Bombay, in addition to the existing services to Madras and Calcutta, it appears to your Committee, that having regard to the facilities already afforded by the railways under construction in India, and to the prospect of the early completion of the main lines of communication connecting the Port of Bombay with the Presidencies of Calcutta and Madras, the North Western Provinces, and the Punjab, the time has arrived when tenders should be invited for a weekly service to Bombay alone, and the separate postal service between this country and Madras and Calcutta should be discontinued.

" 2nd. That such service should be on the footing of an express service, entirely unconnected with any other mail services to the eastward of Suez.

" 3rd. That the tenders should be for the whole service to India, or for separate weekly or fortnightly services, at the option of the parties tendering.

" 4th. That the time table should be based on a prescribed speed of not less than 11 nautical miles per hour, on the voyage between Marseilles and Alexandria, and 10 miles per hour between Suez and Bombay; but that the tenders be required to state also terms in each case for higher rates of speed, not less than one additional mile per hour.

" 5th. That in consideration of the outlay which must necessarily be incurred in the construction of new vessels, or adapting those now employed, for the efficient performance of the future service to India, it is expedient that the new contracts shall run for a term of not less than years, subject to a subsequent notice of two years on either side.

" 6th. That Her Majesty's Government shall take into their early consideration the arrangements to be made for maintaining a fortnightly or half-monthly service to China, and a monthly or four-weekly service to Australia, having regard to any facilities which may be afforded by the monthly service to China, now performed by the Messageries Impériales from Marseilles.

" 7th. That, in the opinion of your Committee, the arrangements under which India now defrays a moiety of the net cost of the China service, after deducting the postal receipts, is not equitable as regards that Government, and should be modified.

" As regards the Telegraphic Question.

" 1st. That, having regard to the magnitude of the interests, political, commercial, and social, involved in the connection between this country and India, it is not expedient that the means of intercommunication by telegraph should be dependent upon any single line, or any single system of wires, in the hands of several foreign Governments, and under several distinct responsibilities, however well such services may be conducted as a whole, in time of peace.

" 2nd. That the establishment of separate lines, entirely or partially independent of the present line through Turkey, is therefore desirable; and, in that view, that means should be taken for facilitating the use of the lines of telegraph which connect the Persian system with Europe, by way of the Georgian lines of the Russian Government, and for bringing, if possible, within the Turkish convention the line recently established through Syria, for connecting Alexandria with the main line to India at Diabekir.

" 3rd. That, with the view to better security against accident in time to come, the communication by way of the Persian Gulf should be doubled, either by the laying of a second submarine cable, or by continuing the land line from Kurrachee and Gwadel to Bunder Abbas, and thence, under arrangements with the Government of Persia, to Ispahan, by way of Kerman and Yezd.

" 4th. That a proposition made to your Committee, on behalf of the '*Telegraph Construction and Maintenance Company, Limited*,' for the establishment of a direct communication between Alexandria and Bombay, by way of Aden, on the principle of a line practically under one management and responsibility, between London and the Indian Presidencies in the first instance, and afterwards with China and the Australian Colonies, is deserving of serious consideration, and such reasonable support as the influence of Her Majesty's Government may be able to bring to its aid.

" 5th. That considering the great outlay of guaranteed railway capital already incurred in the establishment of the telegraph on the several lines of railway in India, it is expedient that means should be taken for affording the public the utmost benefit attainable from that expenditure, either by the Government of India sanctioning the use of the wires of the companies by a public company willing to rent the privilege on equitable terms, or by such an organization of the several independent companies as will

establish an unity of system, and bring the use of the lines fairly within the reach of the public.

“ 6th. That the magnitude of the interests involved in the trade of this country with China and Australia, and the rapidly increasing development of the colonies in population, in commerce, and in the various elements of national greatness, are subjects demanding the attention of Her Majesty's Government with a view to the promotion of such arrangements as will bring these communities within the reach of telegraphic communication with Europe.”

Draft Report proposed by the Chairman, read a second time, paragraph by paragraph, amended, and *agreed to*.

Question, That the Draft Report, as amended, be the Report of the Committee to The House—put, and *agreed to*.

Ordered to Report, together with the Minutes of Evidence.

MINUTES OF EVIDENCE.

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MINUTES OF EVIDENCE.

Friday, 23rd March 1866.

MEMBERS PRESENT :

Mr. Baillie.
Sir Charles Bright.
Mr. Crawford.
Mr. Laird.
Mr. Moffatt.

Lord Robert Montagu.
Mr. Schreiber.
Admiral Seymour.
Mr. Stansfeld.

ROBERT WYGRAM CRAWFORD, Esq., IN THE CHAIR.

FREDERIC HILL, Esq., called in; and Examined.

1. *Chairman.*] ARE you the Assistant Secretary of the Post Office?—I am one of the two Assistant Secretaries.

2. Have you brought with you any documents connected with the subject-matter of investigation by this Committee?—I have.

3. Will you be so kind as to put them in?—Yes (*delivering in the same*).

4. Can you enumerate them?—The first is a copy of Mr. Ayrton's Return, No. 276, of 1865. I would state that I have brought exactly what I understood was the wish of the Committee that I should bring. Then there is a copy of the additional contract with the Peninsular and Oriental Steam Navigation Company, dated the 27th of February 1866.

5. The contract applies to the Australian Service, does it not?—It applies to the Australian Service amongst others; but it applies to the India and China Services also. The next is a statement of the voyages performed in 1865, in continuation of the statement at page 45 of Mr. Ayrton's Return. The next is a return of the rates of charges and deductions for the year 1865, in continuation of the matter at page 46 of Mr. Ayrton's Return. The next is the time-

tables of the Indian Mail Services of 1864 and 1865. The next is a return of the actual days of departure and arrival of the Mail Packets in 1864 and 1865. The next is a summary of the above return, showing the manner in which the service has been performed. The next is Appendix C., from the report of the Committee in 1853, which was a Treasury Committee upon the Packet Service, presided over by Lord Canning. The next is the present cost of the India and China Packet Services. The next is Parliamentary Paper, No. 211, of 1865, being the memorial of certain London merchants. The next is Parliamentary Paper, No. 347, of the year 1865, being a memorial from merchants, &c., of Madras. Then there are copies of correspondence respecting the proposed transmission of Indian Mails through Italy. Also copies of correspondence respecting the proposed transmission of a weekly mail between the United Kingdom and Bombay.

6. Are there any other documents of any kind in the Post-Office, of which you are aware, which would in any way afford the Committee information upon the subject of their inquiry?—If the Committee will allow me, I will look; but there do not any occur to me at this moment.

F. Hill, Esq.
23 March
1866.

WILLIAM THOMAS THORNTON, Esq., called in; and Examined.

7. *Chairman.*] WHAT office do you hold in the India Office?—Secretary in the Public Works Department, which includes the Telegraph.

8. Have you a list of the papers which you have brought with you?—I have a description of them here.

9. Will you enumerate them?—First, there are copies of the Conventions with Foreign Governments for the establishment of telegraphs between England and India; that is, Conventions 0.43.

with the Turkish and Persian Governments. Then I have the correspondence which took place in 1863, between the India Office and the Railway Companies in this country, and also with the Government of India respecting the transfer of the Railway Telegraphs in India to a private company. Then a correspondence chiefly between the India Office and the Government of India, with respect to the defective working of the Indian telegraphs; that is to say, the telegraphs

*W. T.
Thornton,
Esq.*

W. T.
Thornton,
Esq.
—
23 March
1866.

graphs in India. Then I have a similar correspondence with respect to the arrangements in progress for remedying the defects of the Indian telegraph. I have also a copy of a letter from the Chairman of the Electric and International Telegraph Company, being a communication from him with respect to the transmission of messages by the Indo-European line, when

it should be formed. It is difficult to describe in a few words the nature of his proposal. Also annual reports of the administration of the Telegraph Department in India, for the years from 1855-56, to 1861-62 inclusive, since which latter date no report has been submitted. Those are the papers which I have to produce (*delivering in the same*).

RICHARD JOHN RANDALL, Esq., called in; and Examined.

R. J. Randall,
Esq.
—

10. *Chairman.*] Are you the chief clerk in the office of the East Indian Railway Company?—Yes.

11. Have you been instructed by the Secretary to prepare in the office of the East Indian Railway Company, and to procure from other Railway Companies also, where you could do so, returns of the expenditure upon telegraphs in India?—Yes.

12. Have you got those returns?—Yes, I have them from seven of the Companies.

13. Are those complete returns from all the Railway Companies?—Yes; all but one—the return from the Great Indian Peninsular Company is not there.

14. Were you authorised by the secretaries or other officers of the Companies who have given you those returns, to put them in to the Committee on their behalf?—All of them (*delivering in the same*).

RICHARD VALPY, Esq., called in; and Examined.

R. Valpy,
Esq.
—

15. *Chairman.*] ARE you in the Statistical Department of the Board of Trade?—Yes.

16. Do you produce some returns from the Board of Trade relative to the trade and commerce of this country with the several countries to which the subject of the inquiry of this Committee relates?—Yes, I do (*delivering in the same*).

17. For the year 1864?—Partly for the year 1865 and partly for the year 1864. The figures for 1865 can all be prepared in the course of a few days, if it is the wish of the Committee.

18. Will you put in the return for the year 1864 now, and send that for the year 1865 when it is completed?—I will do so.

19. Will you enumerate the papers which you

have put in?—The first is the total value of the imports and of the exports of British produce into and from the United Kingdom in the year 1865. The next is the total tonnage of vessels entered and cleared at ports in the United Kingdom in the year 1864. Then there is the total value of the imports from and exports of British produce to India and other countries in the East, in the year 1865. Then there is the tonnage of shipping entered from and cleared to India and other countries in the East, in the year 1864. Then there is the value of the principal articles imported from and of British produce exported to India and other countries in the East respectively, in the year 1865.

Friday, 13th April 1866.

MEMBERS PRESENT:

Mr. Baillie.
Sir Charles Bright.
Mr. Childers.
Mr. Crawford.
Mr. Laird.
Sir Henry Rawlinson.

Mr. Schreiber.
Admiral Seymour.
Lord Stanley.
Mr. Stansfeld.
Mr. Turner.
Mr. Weguelin.

ROBERT WYGRAM CRAWFORD, Esq., IN THE CHAIR.

MR. THOMAS TAYLOR, called in; and Examined.

20. *Chairman.*] You are in the employ of the Great Indian Peninsular Railway Company, are you not?—Yes; I am the Registrar.

21. Have you any paper to put in showing the expenditure of that company upon telegraph service?—Yes (*delivering in the same*).

22. Can you state the point of junction between your railway system and the East Indian railway system?—Jubbulpore.

23. How far from Bombay will that be when the line is completed?—Six hundred and fifteen miles and a quarter.

24. And when do you expect that your portion of the line will be open for traffic?—In the spring of 1868.

25. How far is it open at present?—To Lall Bagh, 309½ miles from Bombay.

26. What will be the point of junction be-

tween your railway system and the Madras system?—Raichore, 440½ miles from Bombay.

27. When is it expected that your line will be open to Raichore?—In January 1869.

28. How much of it is open at present?—To Sholapore.

29. What distance is that from Bombay?—Two hundred and eighty-two miles and a quarter.

30. You have a line branching off from your north-east main line to Nagpore, have you not?—Yes.

31. What would be the distance of Nagpore from Bombay?—Five hundred and nineteen miles and a quarter.

32. When do you expect that that will be opened?—At the end of this year.

33. How far is it open at the present time?—To Budnaira, 411½ miles from Bombay.

Mr.
T. Taylor.
13 April
1866.

MR. WILLIAM EDWARDS, called in; and Examined.

34. *Chairman.*] You are in the service of the Madras Railway Company?—Yes.

35. The point of junction between your railway system, and that of the Bombay line, is Raichore, is it not?—Yes.

36. What distance from Madras would that be?—Three hundred and forty-seven miles.

37. When is it expected that that line will be opened?—In July 1869.

38. How far are you open at present?—We are open to Cuddapore, 161 miles from Madras.

Mr.
W. Edwards.

FREDERIC HILL, Esq., called in; and Examined.

39. *Chairman.*] You are Assistant Secretary to the General Post Office, are you not?—I am.

40. You have seen, I believe, the documentary evidence which was put in by the Post Office authorities the other day?—Yes.

41. Have you anything to add in the way of documentary evidence?—No, not at present; but if the Committee will allow me I will take the opportunity of correcting an important error in the printing, which is made in the first paragraph of No. 1 of the Appendix. It is there stated, in the last line, that the total cost of the India and China mail packets is 120,174*l.*; it should be 220,174*l.* In the next line the sum is correctly stated, 220,174*l.*

42. May the Committee take these papers as containing the whole of the information of a
0.43,

documentary character with which you have to supply them?—So far as I can at present see, unless in the course of examination something may suggest itself.

43. I see that Mr. Chetwynd, the Receiver and Accountant General of the Post Office, with whose estimate of the present cost of the India and China packet services these papers commence, assumes the present loss upon the Indian service to be about 48,000*l.* per annum?—Yes.

44. Can you supply the Committee with the details of Mr. Chetwynd's calculations?—Yes; I have in my hand a paper in which those details are given, and I will hand it in if the Committee will allow me (*delivering in the same*).

45. Are the letters, upon which those figures are calculated, counted; are they taken on an
A 2 average,

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average, or how is the number arrived at?—An actual account is taken of a certain number of mails, and the totals are multiplied so as to produce an estimate for the year.

46. In point of fact, the basis of the calculation, so far as the number of letters is concerned, is merely an estimate?—It may be considered an estimate, taking as the basis the actual counting and observation; from that, we calculate what the whole number of letters must be in the course of the year; knowing well, from experience, that the basis so formed is a safe one.

47. You think that you can rely upon it for practical purposes?—Yes.

48. Mr. Childers.] When you take one month or more as the basis of the calculation, do you take the weight of the letters, or count the number of letters, or the stamps on them?—I believe that in cases where great precision is required, they take the number of letters, and the postage upon each individual letter.

49. The actual stamps?—Yes, the actual stamps, or the money paid upon them.

50. Chairman.] Is it upon the same basis that the number of letters is calculated which is returned in the annual report of the Postmaster General to the Treasury?—No; the number that is given in that annual report is not, of course, confined to the Indian mails or to any mails; that is a return of all the letters that are delivered in this country, whether inland, foreign or colonial.

51. I recollect having seen, in that report, a statement that the number of letters passing between this country and India is so many, and of those passing between this country and Australia so many?—Yes, that has been mentioned from time to time; but it does not form part of the return which I supposed the question to refer to. The letters between this country and India or Australia would be reckoned from a basis obtained either by counting or weighing the letters in a certain number of mails. We know, by experience, that a pound weight of letters contains a certain number of letters, therefore, if we have the weight, we can calculate the number of letters with considerable precision.

52. Mr. Childers.] Then that calculation is not from the actual number of letters or the stamps on them, but from the weight of the letter part of the mails?—I cannot say which it is; but whether one way or the other is taken, we are quite sure that the result is a fair one.

53. Chairman.] Are the letters of the Government and the public despatches generally carried free, or are they charged with postage?—They are charged with postage.

54. How is that postage levied; are stamps affixed?—Not as respects letters from our own Government offices. It has hitherto been the practice, I believe, at the India Office to put stamps upon the letters; but it is a practice which, I believe, they are about to discontinue as productive of unnecessary trouble. But the practical result of course is exactly the same, whether they put stamps or not.

55. Have the letters that are despatched from the India Office to the Indian Government stamps upon them?—Yes; hitherto, I believe, they have generally put the actual stamps upon them.

56. Should you refuse to forward letters in the Post Office if they were not stamped?—No.

We do not refuse to forward unstamped letters to India, and have not for a long time, even from private persons, and still less should we do so from a Government department.

57. With regard to Government letters which come from India, do they arrive stamped?—I believe they have hitherto generally arrived stamped from India to the India Office.

58. Then the revenue in either case, so far as it is derived from stamps, goes into the account of the country in which the stamp is affixed?—Exactly; whether with stamps or without stamps, the financial effect is exactly the same.

59. Do you draw any distinction between the Marseilles and Southampton part of the mails?—We draw this distinction, that the letters sent *via* Marseilles bear a heavier postage than those sent by way of Southampton.

60. I mean whether they are equally subject to charge?—Yes; there is no distinction.

61. Are bulky despatches of the Government passing by way of Southampton, containing printed documents, forms, and matters of that kind, subject to charge in the same way?—Yes; exactly the same.

62. Then, in point of fact, this sum of 48,000*l.* which is stated by Mr. Chetwynd as being the loss upon the India service, is the sum which may be said to represent the maintenance of the political connection between this country and India?—Political and commercial.

63. But the commercial part of it is paid in stamps, which the merchants affix to their letters? Yes, but those stamps are not sufficient to pay the cost of the service.

64. That 48,000*l.* is the whole of the difference?—It is the whole of the loss upon the India service, but is exclusive of the China service, which has always been ranged with the India service, by order of the Lords of the Treasury.

65. Would not the sum charged be a more proper term than loss, because the Post Office does not consider this as a matter of profit and loss, as a private individual does it?—Yes, we do exactly the same; we look upon the Post Office very much as a great commercial department.

66. Then it is a profit and loss department to the Government?—Yes.

67. And we may consider the Government then as carriers for the public?—Exactly.

68. Seeking, if they can, to earn profit out of it?—Yes; at any rate, guarding against losing.

69. £. 48,000 is, upon the whole, the charge to which the Imperial Exchequer is subjected for the maintenance of the postal communication with India?—No; 48,000*l.* is the loss, if you will allow me so to state it, which the Imperial Government and the Indian Government jointly bear, for the sake of the communication with India.

70. Is any adjustment made afterwards of that loss?—Yes, the Indian Government pays half of it.

71. Then the Indian Government pays half, in addition to the sum which they are bound to pay under the vote of Parliament?—The arrangement with the Indian Government is simply this: We keep the account; at the end of the year, we say: the service has been maintained at such an expense; the letters have produced so much sea postage; there is a balance in the account of loss amounting to such a sum; you pay half and we pay

pay half; and they remit their share of the balance to us.

72. I suppose you could state what is the financial result upon each year for some time past?—Yes, certainly.

73. Would that bear out your calculation of 48,000 *l.*?—Yes; because, as I have mentioned before, the loss upon the China service is coupled with it. The 48,000 *l.* is the estimated loss upon the India service alone. But India is called upon to pay one-half of the loss upon the China service also. Therefore, the sum which they pay, of course, is not a half only of the loss upon the Indian service, but a half also of the loss upon the China service.

74. Mr. Childers.] Is not this the case, that the Post Office receives an account from India of the sea postage collected on all letters from India?—Yes.

75. The sea postage being the difference between the total postage on each letter and that part which is reserved for internal Indian purposes?—Yes. Out of every 6 *d.* they account to us for 5 *d.*

76. And out of that 5 *d.* we retain 1 *d.* for our own inland postage?—Certainly.

77. In the same way, on every letter going from England to India we retain 1 *d.* for our inland postage; and we account to the Indian Government for 1 *d.* for their inland postage, and the 4 *d.* is left for the sea postage?—Exactly so; on every single letter.

78. Therefore, 4 *d.* out of every 6 *d.* is the sea postage of all letters between England and India?—Yes.

79. And a similar proportion on letters between England and China?—Yes, except that the postage to China is 1 *s.* Therefore, the sea postage to China Proper is 11 *d.*, inasmuch as we make no delivery at Shanghai, and so forth; but to Hong Kong the sea postage is 10 *d.*

80. Then, on one side of the account is placed that 4 *d.* and that 11 *d.*?—Yes.

81. On the other side of the account is placed the whole of the contract service to India and China, and the transit service across Egypt and the agency?—Yes.

82. The difference between those two is halved, and one-half is charged upon India?—Exactly.

83. Is there not, however, one slight modification of that, that the service is credited with a certain proportion of the expense on account of the Australian mails?—It is so, on account both of the Australian and Mauritian mails.

84. So that you have on the one hand the 4 *d.* and the 11 *d.*, the charge on account of Australia and the charge on account of Mauritius, and on the other the contract and the transit?—Yes, and other miscellaneous expenses.

85. And the half of the difference between those two is charged to India?—Yes.

86. If, however, the Australian service were separated from the Indian service there would be no longer that credit on account of the Australian service?—No.

87. And in that case the Indian charge would be so much greater?—Yes.

88. Chairman.] I see it is stated in a letter which was addressed by yourself on the 14th of July 1865 to Mr. Merivale, at the India Office: "Sir Charles Wood is no doubt aware that the service to India, even as now conducted, entails a heavy loss, such loss amounting to not less than 0.43.

about 80,000 *l.* a year." How do you reconcile that statement, made in July 1865, that the loss is 80,000 *l.* a year, with Mr. Chetwynd's estimate that the loss is 48,000 *l.* a year?—It is simply that, in the one case the loss on the China service is evidently included, and that in the other it is not.

89. Are you not able to give us any detailed statement of what is the loss upon the Indian service as distinct from the loss upon the China part of the service, and upon the Australian part of the service?—Yes, we have estimated that.

90. Is the loss upon the Indian service greater or less in proportion to the amount paid under the contract than the loss upon the other two services taken singly or together?—I do not bear in mind the proportions. There is great difficulty in solving such a question, owing to the complex nature of our contracts with the Peninsular and Oriental Company. It is very difficult to say that so much belongs to the China service and so much to the Indian service.

91. By the term "sea postage," which is used in Mr. Chetwynd's Memorandum, are we to assume that, with regard to the 10 *d.* charged upon letters *via* Marseilles to India, the amount of sea postage is 6 *d.*?—No, 4 *d.* is the sea postage.

92. That is to say, upon every letter that is sent to India by way of Marseilles 10 *d.* is charged for the distribution of it?—The charge is, first, the sea postage of 4 *d.*, the inland postage at this end 1 *d.*, the inland postage at the India end 1 *d.*, and 4 *d.* for transit through France.

93. What is the amount asked of Parliament for the whole packet service this year?—£. 821,164.

94. What is considered to be, what you term at the post-office, the loss upon the packet contract service?—Accounts are now in preparation to determine that with as much precision as possible for the last year; but I have no doubt, in my mind, that the accounts will show a loss of between 300,000 *l.* and 400,000 *l.*

95. That is to say, between 300,000 *l.* and 400,000 *l.* will represent the whole sum which the exchequer of this country has to bear for the maintenance of its postal communications with all parts of the world?—Yes, after taking credit for the postage.

96. Mr. *Weguelin*.] There was a return in 1853 in which the loss on the India service was stated at 47,036 *l.* Has there been any reduction of postage in the interval?—Yes, a large reduction. The comparatively small sum just named was the loss when the postage was much higher than it is now.

97. Can you state to the Committee what the reduction has been in that interval?—Yes; within the interval in question the postage of a half-ounce letter *via* Southampton, including an additional postage on India (vary with the length of the inland service) was, on the average, about 1 *s.* 3 *d.*, as compared with the present total charge of 6 *d.*; and *via* Marseilles, about 2 *s.* 11 *d.*, as compared with 10 *d.*

98. Mr. *Childers*.] If you refer to page 3 of the papers you will find that 47,000 *l.* was the loss upon the Indian, China, and Australian services; Alexandria, Calcutta, Hong Kong, and Sydney?—Yes.

99. That was the total loss on the whole of the Eastern service?—Yes; but when the Australian service was included (at that time a service of once in two months), the postage, as stated

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stated in the note, at the bottom of page 3, was much higher than at present.

100. *Mr. Weguelin.*] There was then a loss of 47,036*l.*?—Yes.

101. *Chairman.*] Do you still maintain mail agents on board the steamers on the other side of Suez?—Yes.

102. They are generally officers of the Royal Navy, are they not?—Yes, they are always so.

103. Do you consider it necessary that you should keep a mail agent on board now that the contract is transferred from the Admiralty to the Post-office?—Upon the whole, we think it is desirable. We have sometimes had doubts upon the subject, but, upon the whole, we think it is desirable to have them there.

104. That forms a considerable item of charge, does it not?—Not a very heavy charge.

105. You have the payment of the salary of the officer, and you have his accommodation on board the steamer and his victualling to pay for, have you not?—Yes, we have, but then he has his half-pay, or whatever may be his Admiralty allowance, irrespective of our payment. Our payment is merely in addition to that. I think it is generally about 100 *l.* a-year that we pay, in addition to what must necessarily enter into the subsidy for his accommodation on board.

106. Do they have a mail agent on board the Cunard steamers?—No.

107. Have you not a sorting establishment with those steamers?—Yes.

108. In the event of a sorting establishment being established on board those packets to Bombay, would that sorting establishment be under the control of the English or the Indian Post Office?—No doubt, the Indian Post Office; our sorting, viz., that of the homeward mails is done chiefly in the Mediterranean. India is desirous of having the outward mails sorted, and, if that should be accomplished, it would probably be between Suez and Bombay that the sorting would take place.

109. Does that require a large amount of accommodation?—It does; and that has been one difficulty. Owing to the heat there prevalent, the Peninsular and Oriental Company are desirous of having all possible accommodation for their passengers; and, therefore, they could not so readily spare sorting rooms for us between Suez and Bombay as between Marseilles or Southampton and Alexandria.

110. If you had a sorting establishment on board, would that enable you to dispense with the services of the mail agent?—It would not make much difference in that respect, because we could not, of course, rely upon our sorting officers for nautical information. At present we are influenced very much by the report of the naval agent in deciding whether there has been cause beyond control in the case of any ship being too late. If the cause is not beyond control, we impose a penalty; if it be considered beyond control, we do not impose a penalty; and the report of the naval agent is our principal guidance in coming to a conclusion in the matter.

111. *Mr. Childers.*] Then, if the system of absolute penalties were substituted for the system of conditional penalties, the use of a naval agent would not be so great?—No, certainly not.

112. In all the tenders that you call for you give the option to the tenderer, do you not, to

state whether the penalties are to be absolute or conditional?—Yes.

113. Is it your opinion that the expense of the naval agents is greater or less than the value that you get from them?—That is a difficult point; I am disposed to think that in some cases the expense is greater than the value.

114. In the Eastern packet communication is that so?—I am not prepared to say.

115. Speaking of the sorting, is it the case that the Australian letters are sorted on the outward passage?—Not upon the outward passage but upon the homeward passage.

116. My question had reference to the outward passage?—No; excepting in the case of New Zealand.

117. There was a proposal, was there not, that they should be sorted between Galle and the eastern Australian Colonies?—I do not think it ever amounted to a proposal, but it has been suggested.

118. It has not been adopted at any rate?—No, it has not.

119. *Mr. Weguelin.*] Is there any mail agent between Southampton and Alexandria?—No.

120. There the sorters take the place of the mail agents, do they not?—Yes.

121. *Chairman.*] I presume the information that is contained in the tables with which the Committee has been furnished, with regard to the times of arrival and so forth, is that which is furnished by the mail agents?—No doubt.

122. *Mr. Weguelin.*] Do you not rely upon the log book as much as upon the report of the mail agent?—The log book being a document belonging to the owner and contractor, we could not safely rely upon it for determining whether the cause of delay was beyond control or not. Sometimes the captain and the naval agent are at issue upon that point.

123. *Chairman.*] I have asked those questions as regards the sorting on board and the mail agent, because it may be necessary by-and-by, in the interests of the Indian community, to have the letters sorted on board ship before they arrive at Bombay, and if it became a question as to whether they should have that sorting on board without a mail agent, or have a mail agent without the sorting; which do you, from your experience of the Post Office, consider would be most desirable in the interest of the public generally?—I should say that so long as the arrangement continues for levying penalties and granting premiums upon the present footing, the naval agent could not safely be dispensed with.

124. *Mr. Childers.*] That is the condition of the system?—Yes.

125. Going back to the question of the total cost, if the contribution on account of the Australian and Mauritius mails were not included, what would be, what you term, the loss upon the Indian and China service?—The contribution in the case of the Mauritius, of course, is small; the contribution in the case of Australia, I think, is rather more than 30,000*l.*; putting the two together at 33,000*l.*, then the loss would be augmented by 33,000*l.*, and instead of being 82,000*l.* as at present, it would become about 115,000*l.*

126. Of that, 57,500*l.* would be the loss charged to India, and 57,500*l.* would be the cost to the Exchequer?—Yes, exactly.

127. *Admiral Seymour.*] I see that in the contract for the conveyance of mails there is an agreement

agreement that a first class cabin, bed, and bedding, and all, is to be allowed to the agent, but I can see nothing about 100*l.* a-year; are you sure that there is an allowance of 100*l.* a-year paid to the naval agent by the Post Office?—That would not appear in any contract with the companies; they have nothing to do with that payment.

128. But the Post Office undoubtedly have?—Yes; perhaps I might be allowed to add that the naval agents in India get an additional 100*l.*; the allowance to them is more than 200*l.*, about 215*l.*

129. Mr. Childers.] That is not allowed from the company, but from the Government?—Certainly.

130. Sir Henry Rawlinson.] In the estimate for the packet service there are stated to be 18 agents at 215*l.*, and 15 at 125*l.*, exclusive of their naval half-pay?—Yes.

131. Mr. Weguelin.] Can you estimate the total cost of the mail agents as applied to India?—£. 2,795 is the cost in the shape of salaries to the naval agents on board the India and China packets; but I cannot separate China from India.

132. Can you estimate the other expenses which the country incurs in consequence of there being a mail agent on board each packet; what is allowed to the Company for his maintenance and for his cabin?—That would be a difficult question to answer; it goes into the subsidy, and we do not know how much the Company assign to that particular charge.

133. Admiral Seymour.] If anything goes wrong during a passage, whom should you look to to report that subject?—The naval agent would report it to our Naval Superintendent at Southampton, and he would report it to us.

134. If the vessels required surveying, and were not kept in proper condition, to whom should you look for that?—To the naval agent.

135. For any alterations which were necessary would you refer to the naval agent?—Yes; if he thought any alterations were necessary and required by the contract, it would be his duty to report them.

136. Mr. Stansfeld.] You calculate, as I understand, that the loss to India, if the Australian contribution were withdrawn, would be half 33,000*l.*, supposing England and India were to share the loss?—The additional loss, if the Australian and Mauritian letters were both withdrawn, I should say would be about 33,000*l.*

137. How do you arrive at that figure of 33,000*l.*?—We arrive at it in this way: we ascertain by estimate based upon real observations, as I have already mentioned, that a certain number of letters are conveyed to China, and a certain number of letters conveyed to India, in the same packets, and a certain number of letters to Australia and the Mauritius. Then, we ascertain, by an easy computation, that the average mileage of the service is so much; *4s. 6d.*, I remember, is the average mileage of the service. Then, we say there are so many miles run by the packets between Southampton and Marseilles and Galle, the point at which the Australian packets branch off; and then it is a mere matter of calculation what is the fair charge for those letters as compared with the cost of all the letters, and that charge we debit to the Australian colonies and ourselves (we paying half the cost of the Australian service) and give credit for it to the Indian service.

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138. Then the 33,000*l.* would be the Australian postage, plus the Australian contribution?—Not the postage; the 33,000*l.* would be our estimate of the actual cost of conveying the Australian and Mauritian letters, as far as they go by the Indian and China packets.

139. But surely the loss to England and India, if you take them as partners in the concern, if you were to sever the Australian service from the India service, would be the loss of the postage plus the loss of the Australian contribution?—No, I do not see that; if the postage were to be tenfold it would not, in my estimation, make any difference in the particular amount which we are now considering. Say, for instance, that there are 5,000,000 letters conveyed altogether by the Indian and China packets, and say that the cost of conveying 5,000,000 letters is so much, and say that 1,000,000 of the letters are on account of Australia; then the cost of conveying the Australian letters is one-fifth part of the whole cost of the conveyance of all the letters.

140. Mr. Childers.] If you had not the Australian and Mauritius letters to convey as far as Aden and Galle, you would still have to pay just as much for the Indian letters, would you not?—Exactly.

141. Therefore all that you can get out of the Australian and Mauritian letters is to the good in the Indian contract?—Exactly so.

142. And the amount that you actually do get and credit to the Indian contract is this 33,000*l.*?—Yes.

143. You credit that in the account?—Yes.

144. Therefore there would be that additional loss if that were not credited?—Yes.

145. Mr. Weguelin.] But you estimate the cost of the packet service from Galle to Australia, do you not?—No; the service from Galle to Australia is a separate contract, and has nothing to do with India.

146. Has it nothing to do with the China service?—No, the China service is connected with the Indian service.

147. Mr. Childers.] And then to elucidate it still more, the arrangements with respect to Australian letters is distinct from the arrangements with respect to Indian letters, is it not; that each side takes its postage?—It does.

148. So that there is no account between you and Australia, except for the moiety of the gross contract, and some small matters?—Yes; and some small matters; foreign letters and so forth.

149. Mr. Stansfeld.] If I understand you, you now credit the service with the proportion of the Australian postage fairly attributable to the transit from London to Galle, and you debit Australia with the 15,000*l.*, or whatever it is that is necessary to make up the proportion?—Yes. I should not however call it postage; it is part of the actual cost of the packets.

150. However, in this calculation of the extra loss, which would fall upon England and India if the services were severed, you assume that the services would be totally severed from London?—Yes.

151. And that loss would be very much diminished supposing the services parted only at Suez?—Certainly.

152. And it would be diminished by the greater proportion of that sum?—Probably so.

153. Chairman.] You have every year an adjustment to make, have you not, as between this

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F. Hill, Esq. this country and India, and Australia?—Between this country and India; but, as Mr. Childers has mentioned, the footing of the Australian contract is different, and more simple.

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154. The whole of the vote for the India, China, and Australian service is 162,125 £, is it not, from which there is a deduction of 41,000 £, being the estimated proportion to be paid by the Indian Government?—Yes.

155. At the end of the year you have an adjustment to make with the Indian Government with respect to that 41,000 £?—I do not know of any further adjustment than that estimate.

156. Do you happen to have a copy of the annual adjustment by you?—I have now in my hand an adjustment up to last March, which our Accountant and Receiver General has just handed to me.

157. Will you put it in in evidence?—Yes, I will do so.

158. With regard to the contracts with the Peninsular and Oriental Company, I suppose those contracts are the two several articles of agreement dated respectively the 1st day of January 1853, and the 7th day of July 1854, which have been printed already by order of Parliament?—Yes, and the one of this year.

159. There is one also for the conveyance of mails between Aden and Bombay?—Yes; they are all recited at page 17.

160. What is the object and intent of this contract of the 27th of February last?—The primary object is to discontinue certain surveys which are made of the packets, in consideration of the Company striking off 5,000 £ from their subsidy.

161. Mr. Childers.] And also to combine all the contracts into one, and reciting them together, is it not?—We took advantage of the opportunity of reciting them all together.

162. Chairman.] I see that some change is introduced with regard to the hours, in clause 9 of this contract, in page 20?—Yes. The object of that change is this. It is necessary that the undertaking should assume the shape of a certain number of days and hours, instead of the Company undertaking, as heretofore, that their boats should run at a certain speed (10 knots an hour), in order to enable us to apply the system of penalties and premiums.

163. Are the number of days calculated upon the contract rate per hour?—After consultation with the Admiralty, the Company undertook to provide ships that would run at the average rate of 10 knots an hour; but it is of course impossible, in navigation, to go in a straight line from one point to another. There are deviations; and after making a calculation of the time that would be required to make the voyage in a straight line, at the rate of 10 knots an hour, we asked the Admiralty what addition it would be reasonable to make for these deviations; they advised an addition of 5 per cent., and with that addition we completed the calculation. Thus we determined that the packets must arrive at Bombay, for instance, in a certain number of hours after leaving Suez. The object was to turn into a practical shape the undertaking to run at the average rate of 10 knots.

164. Do you consider that the service of the Indian mails has been conducted with regularity?—I do, upon the whole; considering the difficulties, the complex nature of the arrangements, the many points of junction, and the length of the

voyages, I consider that it has been performed with very creditable regularity.

165. Upon the whole, comparing the manner in which the Peninsular and Oriental Company have performed this contract with the services with other parts of the world performed by other companies under contract, you consider that the public interests have been properly protected and served?—I do. Their vessels arrive more frequently before the time than after the time; thus in the last two years 162 voyages have been performed before the time as compared with 126 voyages after the time.

166. But does not that show irregularity?—It does; but we must expect, in these great distances, a certain amount of irregularity.

167. But the irregularity has never occurred to the authorities of the Post Office being out of the way?—No. In many cases the after time is only a few hours.

168. Occasionally it has been the case, has it not, that the mails have not been delivered by reason of accident having happened to the steamers?—Yes.

169. They have been lost, or have otherwise suffered damage?—No mail was ever lost that was conveyed by this Company. Mails have been submerged for a time, but they have been recovered, and by a careful process of drying most of the letters have been ultimately recovered without any material injury.

170. And the contractors have always had supplementary vessels ready to take up the service in the case of vessels which have been lost?—There was lately one exception, but that is the only exception that I recollect. In that case the mails were transferred to a French ship which fortunately happened to be at hand.

171. I see, on turning to page 13, under the head of "Stoppages at Aden," the figure 2; does that mean that the contractors have the privilege of remaining two days at Aden?—At the time that this time-table was prepared, no doubt, they must have had that privilege.

172. And the time-table was a part of the contract?—Yes; but in point of fact, the stay is generally only a few hours; and in calculating the number of hours which they are to be allowed in going, say, from Suez to Bombay, that number is exclusive of stoppages, so that it would be an advantage to them to remain longer than is absolutely necessary; and the real stoppage generally, is about eight or nine hours.

173. It appears by the return, No. 7, on page 16 of the papers put in the other day, that in the year 1865, 48 voyages were performed between Suez and Bombay, and that 142,656 nautical miles were run. That would bring out I believe, 2,972 miles as the average distance run between Suez and Bombay both ways, and the result is an average speed of nine nautical miles an hour?—Yes.

174. It also appears as the result of the tables which are printed on pages 7, 8, and 9 of these papers, that the actual time taken in performing the voyages between Suez and Bombay has been, upon the average of 48 voyages, exactly 14 days, although I believe that a calculation which has been made will show that the distance performed at the average rate of nine nautical miles per hour, would bring the result to less than 14 days, exclusive of stoppages; can you have a calculation made upon this particular point upon the basis of those figures which I have quoted, of the time

time taken in performing the voyages between Suez and Bombay, taking Suez to Bombay, and the number of voyages performed in the year, as stated in No. 7 of the return, showing the exact number of days that would be consumed per voyage?—Yes, that calculation shall be made.

175. Because that calculation shows that the voyages have been exceedingly irregular as to time, but that the average is 14 days?—One considerable cause of irregularity is the monsoons; we allow more time when the monsoons prevail than when they do not prevail.

176. But the monsoon does not apply in the case of voyages from Suez to Bombay?—No, I suppose not.

177. But upon the whole, the Post Office has reason to be satisfied, you think, with the manner in which the Peninsular and Oriental Company have performed their contract?—Yes.

178. Turning again to Return No. 7 upon page 16, can you explain to the Committee the reason why the average speed per hour in nautical miles in 48 voyages from Suez to Bombay is nine, and in the case of voyages between Suez and Calcutta is ten?—No, I cannot; I will inquire into that point. This is the result of the actual performance; and when they have performed those voyages at the rate of 10 knots an hour, measuring in a straight line, they have done more than they have covenanted to do.

179. Why should they have done more than they covenanted to do upon the Calcutta line, than they have done upon the Bombay line?—I suppose that the greater importance of the Calcutta traffic induces them to have more powerful boats for that service.

180. You mean the importance of the passenger and goods traffic?—Yes, of the passenger traffic principally; our subsidy, large as it is, is small compared with that derived from their commercial traffic, and the receipts from passengers; it is not more than about one-tenth part.

181. Admiral *Seymour*.] Every vessel before she can be employed, is obliged to be able to go 12 miles an hour by the measured mile, in order to get to a speed of 10 miles an hour?—Yes; but it must be remembered that a mile here and a mile in the stormy seas in the East are very different things.

182. Mr. *Childers*.] Reverting to the calculation which the Chairman asked you to undertake just now, and to which I do not think your answer was quite clear, it appears by the return at the foot of page 16, that 48 single voyages took place between Suez and Bombay in the year 1865, and that the distance run was 142,656 miles; that gives, I think, 2,972 miles a voyage; and that at nine knots an hour, gives exactly 330 hours on an average of 13 days and 18 hours for each voyage; the other return would give an average of 14 days; so that the difference between the two is six hours; do you believe that to be the average time of detention at Aden?—That may be the explanation. Without inquiry, I cannot say absolutely that it is so; but very likely it is.

183. *Chairman*.] It appears from the correspondence that as long ago as 1860, proposals were made by the Director General of the Post Office in India to the Government for the abolition of the Contract Packet Service as between Aden, Madras, and Calcutta?—Yes.

184. And that, in consequence of the state of completion to which the railways are advancing,

that question has been much further discussed, more recently, in connection with applications which have been made to the Post-office by the mercantile community in London and other communities in India for the establishment of a weekly mail leaving London on a particular day in the week?—Yes.

185. What view does the Post-office here take of that proposition?—As respects the weekly mail, which is the most important part of it, the Post-office has long desired to see such a mail established. It would be much more convenient to ourselves, and, what we regard with greater interest, we believe that it would be very advantageous to the two countries.

186. Do they adopt the view that Bombay should be the main postal port of India?—Yes, certainly.

187. And do you consider that the abolition of the separate Madras and Calcutta sea postal contract would be advantageous, and that it is no longer necessary?—I do not think that at present such a discontinuance would make much difference in the cost of the service. So long as ships must go to Calcutta for the sake of freight and passengers, there is no doubt that our mails can be carried at a moderate expense. About that time, at the instance of the Indian Government, we proceeded to inquire, first, what the Peninsular and Oriental Company would strike off from their subsidy if they were relieved of the necessity of conveying mails to Madras and Calcutta; and we advertised, also, for tenders to ascertain what would be the expense of putting on two additional boats, in the calendar month, between Suez and Bombay. The Peninsular and Oriental Company told us that they could not take off 1*s.* from the subsidy; that it would make no difference to them; that their boats must still ply; and that whether they carried the mails or did not carry the mails, they must require as large a subsidy, on the whole, as they were then receiving. We advertised for tenders for the additional boats, but we received only one substantial offer, which was from the Peninsular and Oriental Company themselves. Their demand was, if I recollect rightly, about 60,000*l.*; and they stated, as the reason for demanding so large a sum, that there were not passengers and freight enough to maintain any additional ships upon that line, and that, therefore, they must look almost entirely to the postal subsidy.

188. Supposing the existing contract with the Peninsular and Oriental Company were at an end, do you imagine that if tenders were invited for the conveyance of a mail once a week, that is 52 times a year, from London to Bombay, the sum demanded would be as large for that service as it is now for the fortnightly service to Bombay and the fortnightly service to Madras and Calcutta?—I should expect that it would be considerably more.

189. The actual mileage run by the steamers would be considerably less, would it not?—Very likely, but that is a secondary consideration.

190. As a fact the distance run would be considerably less, because the difference would be the difference between the distance from Aden to Bombay, and the distance between Aden, Madras, and Calcutta?—Yes, the mileage would be much less, and so it was before when we found that, as I say, we should not save 1*s.* on one side, and that we should have a very great additional expense on the other. And moreover, of course,

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the 52 voyages in the year would have to be compared with the 48 voyages at present performed.

191. Taking the Indian service alone, unconnected with any other services, it would be a weekly communication between Suez and Bombay?—Yes.

192. Which in round numbers would be 52 times 3,000 miles.—Yes.

193. Upon the present footing of fortnightly communication to Bombay it would be half that and the distance between Aden, Galle, Madras, and Calcutta, stated fortnightly also?—Yes.

194. But surely the distance between Bombay and Suez 52 times would be much less than the sum of the other services?—Much less distance, but a much higher charge per mile, I should expect, for that distance; and that this higher charge would much more than counterbalance the saving in distance, I think, judging from past experience. I have no doubt that now, owing to the greater amount of communication with Bombay, we should have tenders to perform the service for much less than was the case four or five years ago, but still I should expect that, upon the whole, the cost would be very considerably augmented.

195. *Mr. Childers.*] Supposing that an additional fortnightly service between Suez and Bombay were substituted for the fortnightly service between Suez and Calcutta, still, so long as the China service is in existence, the only difference of mileage would be the difference between Aden and Bombay, and between Galle and Calcutta, is not that so?—Yes; so long as China is served *via* Galle; if it were found expedient to have the China service *via* Bombay and Calcutta, and then down to Singapore, so as to avoid Galle altogether, then it would be different.

196. You stated, did you not, that the Peninsular and Oriental Company offered to perform a weekly service to Bombay for an additional sum of 60,300 *l.* a year?—No; what I intended to say was that they offered to perform two more services in the calendar month, for about 60,000 *l.* additional.

197. That a weekly service, in the sense of a week being a fourth of a month, between Suez and Bombay, would cost more by 60,000 *l.*?—Yes.

198. But that was on the assumption, was it not, that the China service would continue along its present route?—Yes; but I do not think that that affected their minds. What they stated to me in conversation was that they must continue to send boats to Calcutta. Those boats, of course, would touch at Galle, but go on to Calcutta; and they said that our withdrawing the mails would not save them any expense, and they could not therefore reduce the subsidy.

199. But, even supposing the element of the steamers going to Galle and Calcutta were eliminated, still there would remain that additional charge that the China service would go by Galle?—Yes, at present.

200. Therefore, that is not the basis of calculation which the Chairman has put to you?—No.

201. Which is on the assumption that the service between Suez and Galle would undergo some change?—Yes.

202. *Chairman.*] But do you think that it would be fair, as regards the Indian revenues,

that they should have to bear a portion of the charge of conveying mails between this country and China?—That is a subject which has been fully considered by the Lords of the Treasury, and they have come to the conclusion that it is fair, and it has been the practice for many years.

203. That they should bear part of the cost of the transmission of the China mails from England, in which the Indian community have no interest at all?—The view taken by the Lords of the Treasury, as stated in one of their minutes, was that India has as great an interest in the communication with China, as this country has. If the Committee will allow me, I will read a letter from the Treasury upon the subject, dated the 21st of August 1856, addressed to the Postmaster General, which must have been when the Duke of Argyll held that office. "My Lord Duke, the Lords Commissioners of Her Majesty's Treasury have had before them your report of the 4th instant, requesting further instructions relative to the account which is to be prepared, adjusting between the Imperial and the East India Company's Governments the loss which has been incurred in the conveyance of the mails between the United Kingdom and the East Indies, and their Lordships have directed me to state that in laying down the principle upon which the expense of the postal communication with the East should be borne by the Indian and the Imperial revenues respectively, to which the East India Company signified its assent, it was stated that the entire cost would be 232,300 *l.* per annum, including the mail from Singapore to Australia, and the interests which the Home Government and that of India had in that service were stated as follows:—First. So far as the commercial relations of England and India were concerned, it was laid down that they were equal, but that so far as the political relations of India were concerned, that the cost in relation thereto should be borne entirely by the Indian revenue. Second. That so far as the commercial and political relations with China went, the latter existing exclusively for the former, it was laid down that the interests of England and of India were equal. Third. So far as the communications with Australia formed a part of this service, it was laid down that Imperial interests only were affected thereby. Fourth. Upon the whole, it was decided that the interests of this country and of India might be said to be equally affected by the service, putting the exclusive interest which this country had in the Australian communication as a set-off against the exclusive interest which the East India Company had in the political element of India, and that, therefore, the loss which might arise in the maintenance of this service, after the expense should be credited with the whole of the postage received, including that of the East India Company and the Home Government, should be equally divided. My Lords, however, advert to the fact that after this arrangement was made, and immediately before it began, the portion of the service from Singapore to Australia was suspended, and has not been again commenced; and that thus the balance of interests by which it was thought equitable that the loss should be equally shared has been disturbed. In the account furnished by the Admiralty of the actual expense of the service up to the end of 1855, a sum of 16,018 *l.* 16 *s.* 10 *d.* is deducted from the amount of the contract with the Peninsular and Oriental

Oriental Company, as stated in the minute of this Board of 7 July 1854, while the Imperial revenue has been charged with the sole expense of despatching those mails by other ships. It appears, therefore, to my Lords that strict equity will be done to the respective revenues of India and England, if to the sum of 227,100*l.* 12*s.* 2*d.*, advanced by the English Government, according to the Admiralty account, there be added the sum of 16,018*l.* 16*s.* 10*d.*, making 243,119*l.* 9*s.* 0*d.* as the Admiralty account, the effect of which will be exactly the same, so far as the East India Company is concerned, as if the original agreement had been carried out; that is, that they will pay a sum equal to one-half of the Australian service as a set-off for the political advantages derived by India. I am at the same time to state, with reference to your report of the 6th May last, that my Lords concur with you in opinion that the various charges enumerated therein should be added to the general cost of the service before the account is adjusted" (no doubt that alludes to the miscellaneous charges, the transit through Egypt, and the naval agents); "and I am to observe, with respect to the charge of 8,000*l.* per annum, which has been included in the account furnished by the Admiralty for the conveyance of the mails through Egypt, with a note stating that the same has not yet been paid, that my Lords suppose that this is a charge which has been defrayed by the Post Office. I remain, &c., *James Wilson.*"

204. Is that letter included in the correspondence which you submitted to the Committee the other day?—I think not. There is a prior letter on the same subject, dated 11th July 1854, a copy of which I will send to the Committee.

205. At the present moment what is the state of the case with regard to the establishment of a weekly mail to India?—The state of the case is this. The Post Office has been long in communication with the India Office upon the subject, a subject with which we have ourselves always associated an increase of the postage. We are of opinion that what is so desired on all sides could be done, if the postage were raised from 6*d.* to 1*s.*; not that that would meet all the loss, but that it would do a great deal towards diminishing the loss, and would more than meet the additional loss that would be incurred. I mean 6*d.* added on each route, whether by way of Southampton or of France. The India Office communicated with the Government in India upon the subject, and there was great delay in obtaining a reply from that Government; but at length an answer was received objecting very much to this increase of postage, desiring very earnestly to have the improved communication, but not seeming very anxious to pay anything for it. This reply came to us from the India Office, and in the letter containing it, or in a subsequent letter, Sir Charles Wood stated that he concurred in the objections to an increase of postage; that he was very desirous of seeing a weekly mail established, but that he did not like an increase of postage. That being the state of matters, the Postmaster General referred the question to the Treasury, with whom the decision, of course, ultimately rested. His Lordship stated, in effect, we have said all that occurs to us upon the subject; and the Indian Government seem to have stated their case fully, and now I leave it with you to decide what shall be done; and the decision which was come to, and which was communicated first

to us, and then, by the desire of the Treasury, through us, to the India Office, was, that looking to the strong objections taken by Sir Charles Wood to an increase of postage, the Treasury were not prepared to insist upon that increase; but, at the same time, had decided that whatever additional expense might be entailed, by the establishment of a weekly service to Bombay, must be borne exclusively by the Indian Government.

206. What did the Indian Government say to that proposition?—They have hitherto said nothing.

207. Then, in fact, between the Post Office and the Treasury, and the Indian Government, the community are not likely to get the increased postal convenience that they asked for?—Not unless one party gives way.

208. Then, in point of fact, the profit and loss principle, which you stated at the commencement of your evidence, stands in the way of the Indian community getting this advantage?—Very much in the way.

209. Lord *Stanley*.] Do you not think that the English public, on the whole, is more interested than the Indian public (that Indian public being principally native) in rapid and cheap communication between the great centres of Indian trade and this country?—No, I should think not. I should think that the interests are about equal on both sides.

210. Is not the greater part of the capital which is expended in India, English capital?—I am not able to reply to that question.

211. *Chairman*.] I observe that in a letter written by Mr. Merivale on the 5th of October last at Sir Charles Wood's instance, at page 76, he says, "Sir Charles Wood, however, cannot regard the question as one merely affecting the charge on the Imperial revenues. It has been the perception of the bearing of increased postal communication on the wealth and progress of a country that has induced statesmen of late years to consent to fiscal sacrifices for the purpose of obtaining it." We may infer from that, may we not, that the India Office does not share in the profit and loss views of the Post Office?—I presume so; it is a fair inference, I think.

212. In fact you consider it, do you not, the duty of the Post Office to look at nothing but the question of profit and loss?—I do not say to look to nothing but that; but the Honourable Chairman will remember what the Chancellor of the Exchequer said a few days ago in the House.

213. Sir Charles Wood goes on to say: "There can be no doubt that increased postal communication with India implies increasing relations with that country, increased commerce, increased investment of English capital, increased settlement of energetic middle-class Englishmen; and from all of these sources the wealth and prosperity of England are probably more greatly increased than that of India; and at the present day there are classes in India, not private soldiers, to whom the increase of the rate of postage between the two countries would be not only a hardship, but a positive hindrance to their progress." Do not you think that those arguments by the Secretary of State for India are deserving of great consideration?—I think that any arguments from Sir Charles Wood are deserving of great consideration; but they do not lead me, at least, to the same conclusion. The same arguments appear to me to be applicable to.

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to everything else; the conveyance of passengers and the conveyance of cotton, for example. In point of fact, it is protection that is asked for.

214. But do you really consider that those arguments which Sir Charles Wood has made use of here, and which I see support to a certain extent the question put by the noble Lord just now to you, ought to be subordinate to that profit and loss view which you take at the Post Office?—We take this simple view, that some one must pay for the service; and the question is, whether it shall be paid for by those who are chiefly interested in the communication with India, or whether it shall be paid by the taxpayers generally of this country and India.

215. The Committee are now to understand that at this moment the whole question of a weekly mail to India depends upon the question as to who is to pay what it is presumed would be the increased cost of communication?—That is my opinion.

216. But it is the fact, is it not, that the question is suspended for the present, pending the settlement of that point?—We consider so. We have received no reply from the India Office, and that office has not said that the Indian Government is prepared to pay the additional expense.

217. Sir Charles Wood objected to an additional postage being levied?—Yes.

218. And the Treasury supported him in that view?—I cannot say that the Treasury supported him in that view. The Treasury said that, seeing how strongly Sir Charles Wood had expressed his opinion, they were not prepared to direct that the postage should be increased, and they gave the Indian Government the alternative of paying the additional cost themselves.

219. But the Treasury would be perfectly willing to see this increased advantage given, provided the Indian Government will pay for it?—That is the tenor of their letter.

220. Mr. Childers.] Is not it the case that the Treasury, in objecting to the increased charge for the weekly communication to Bombay, have had, to your knowledge, in view the whole question of the communication with India?—I think so.

221. But the words of the Treasury, in page 81, are: "My Lords are not prepared to adopt such a measure at the present time, and they would not feel warranted in sanctioning the large increase?"—Yes; they would not feel warranted, unless the Government of India should think fit to defray the entire amount of that increase.

222. Are you aware that in preparing that letter the Treasury had under their consideration the entire question of the communications with India?—They had.

223. And the discussion upon this matter was whether, leaving everything just as it stood, it would be proper to add that large additional charge?—Yes, I have no doubt that was so.

224. So far as you are aware, there has been no decision by the Government adverse to the principle of a weekly mail for Bombay?—No, certainly not.

225. And, in fact, this Committee is inquiring into the whole question which the Treasury, by personal communication with the Post Office, were looking into when that letter was answered?—Quite so.

226. So that your answer must be modified so far that the only difficulty as to additional expense is the additional expense to the present

arrangements for the Indian Post Office?—Yes.

227. Sir Henry Rawlinson.] Does not an increase from 6*d.* to 1*s.* seem enormous, considering that the advantage is only an additional increase of communication to the amount of one-twelfth from 48 voyages to 52, and yet the postage of every individual letter is to be raised to double the amount, from 6*d.* to 1*s.*?—We do not consider the present state of things a proper one. We do not think it is right that the British public should be taxed at the rate of 40,000*l.* a year for the sake of correspondence with India, and, therefore, the increase that we have proposed I, individually, should think right, even if there were no increased accommodation to make good that deficit; but the increased accommodation is very much more than one-twelfth; it is a weekly mail to Bombay as compared with a fortnightly mail to Bombay, and a fortnightly mail to Calcutta. That is a very much greater increase than one-twelfth in real accommodation to the public.

228. It is a considerable decrease of the mileage, is it not—a decrease of 12,000 miles a year?—I am speaking of accommodation to the public, and the public, of course, do not care about mileage; they would have their letters sent upon a fixed day of the week to India, and, under such a plan, the letters would arrive at the best possible point in India for their speedy distribution; and the gain to the public would be great.

229. Chairman.] In point of fact, the question of the additional expense has not yet been tested?—Not lately. I mentioned to the Committee that we tested it four or five years ago, but not very recently.

230. Do you see any reason why notice should not be given to the Peninsular and Oriental Company, and why the public should not be invited to send in tenders for the performance of the service from Marseilles to Bombay weekly, and a separate tender for the performance of the service between Marseilles and China and Australia, or to tender for the whole service together; in point of fact, why measures should not be taken by means of public tenders, for testing the question as to whether this improved communication would be more expensive or not than the present communication?—I do not think it would be wise to take that step until the measures are matured, and it is quite determined what to do; because I think that otherwise we should be placed at a disadvantage. I think that our present contract with the Peninsular and Oriental Company is an advantageous one, and that the terms are very moderate.

231. Admitting that the service is satisfactorily performed by the Peninsular and Oriental Company, and that the charges are moderate, how are you to get at the question of increased cost which sometimes there is so much difficulty to provide for, without taking some measures of that kind?—I think it is impossible at present; but the moment it is settled that the increased expense, whatever it may be, shall be met in one of the ways suggested, then we shall be in a condition to give notice to the Company, and to advertise for tenders, which is the only possible means of arriving at a safe conclusion as to what the cost would be.

232. The contract now is from year to year, and upon a year's notice, is it not?—Yes, it is.

233. And do you consider that a sufficient time to enable any competing parties with the Peninsular

Peninsular and Oriental Company to make their preparations?—No, I do not. It is a great disadvantage which we are under, but an advantage which the Peninsular and Oriental Company have never taken advantage of. They have acted with great liberality and forbearance, in my opinion, but we are at a disadvantage in that respect.

234. But the public are, to a certain extent, in the hands of the Peninsular and Oriental Company, are they not?—To a certain extent; but at the same time I think that that could be met. In the recent case, for instance, of Australia, we were in a worse position, for then the Peninsular and Oriental Company might have terminated the contract at six months' notice. The way that we met that case was this. In the tenders we left it to the parties themselves to say when they should be ready to commence the service; and if a very good offer had been received from a substantial company not already in possession of ships, but prepared to expend the necessary capital in building ships, our intention was to go on, as well as we could, with private ships until this company's new ships should be ready.

235. Mr. *Wequelin*.] You had a contract with another company for the Australian service some years ago, had you not?—Yes, we had.

236. Was that conducted satisfactorily?—Very far indeed from that; it was conducted most miserably. It was as ruinous to the company as it was annoying and vexatious to us and disadvantageous to the public; in fact, it was a complete break down.

237. Mr. *Childers*.] You have given it as your opinion that the establishment of a weekly service to Bombay would result in additional expense?—Yes.

238. And you have done that on the understanding that we shall keep up the service twice monthly or fortnightly, whichever it may be by Galle to China?—Yes.

239. That service by Galle to China being also necessary for the once monthly or once in four weeks service from Galle to Australia?—Yes.

240. If the service from Suez to China were only once a month instead of twice a month, and that that would supply the Mauritius and Australian want, would not that, in your opinion, diminish the amount of the contract with the Company?—I think it probably would to some extent, but not to any large extent until the traffic with Calcutta is so diminished that they can take ships off from that line; that, I think, is the only way in which a material saving would be effected.

241. If instead of a twice-a-month service to China we had a once-a-month service to China connected with the once-a-month service to Australia, we should get credit for the whole amount of the Australian contributions, and there would be some diminution, if not a large diminution in the Peninsular and Oriental contract, would there not?—Certainly.

242. Is it not the case that there is between Europe and China a very efficient service by the French Company?—Yes.

243. That service, if I am not mistaken, is once a month, and not once in four weeks?—It is once in the calendar month.

244. If, however, that service was once in four weeks, and our service was once in four

weeks, and the Australian and Mauritius services were once in four weeks, connected with our service, would not that give the whole of the present postal communication which we have with China, and at the same time reduce the amount of what you call the loss?—Probably it would. Of course, however, we have not the gratuitous use of the French boats. We should have to pay a certain sum to the French Government; and if that sum were greater than the saving by the discontinuance of one of the services of the Peninsular and Oriental Company, then there would be no gain, but a loss.

245. At least, we should not suffer a part of the present loss?—I cannot say absolutely; I can only speak speculatively.

246. Do you think it might be wise, as one of the alternatives for meeting this increased loss upon the once-a-week Bombay service, to endeavour to use the French line of mail communication for part of our China service?—I think that we might do, with respect to the French Government, as we did with Belgium; that is to say, so frame our tenders, when we call for the service, as to enable, I will not say the French Government, but the French contractors, for it is not the French Government, to compete and make a tender.

247. And to compete for one, if not for two, of the monthly services?—Yes.

248. Do you believe, as far as you are aware, that the French Company would have any insuperable difficulty in substituting a four-weekly for a monthly service?—I cannot say.

249. Have the Post Office ever had any negotiations with the French Company on the subject?—None. If the French Government were called upon to increase their subsidy in a like proportion, that is, by 1-12th, I should expect that they would have great difficulty, because their subsidy is a very heavy one; it is more than four times that which we pay to the Peninsular and Oriental Company.

250. But you would not exclude from view in any future arrangements, particularly if they comprised a weekly Bombay service, the possibility of saving something through the means of the efficient French service?—No, I should anxiously endeavour to include that service.

251. And is it your opinion, upon the whole, that such an arrangement may offer some prospect of diminishing the loss?—Certainly.

252. With reference again to the service between Galle and Calcutta, you are aware, are you not, that at the present time the railway is not completed between Bombay and Calcutta, or between Bombay and Madras?—I am.

253. Is it not the result of that state of things that passengers returning from Madras or Calcutta to this country, ladies particularly, as a matter of course must go round by Galle?—It is a matter upon which, of course, I can have no precise knowledge; but I presume that very many would prefer going round by Galle.

254. As you said before, is it not the case of the Peninsular and Oriental Company that they must keep up that service between Galle and Madras and Calcutta on account of their passengers?—That is what they said when we last asked them about it.

255. But when the railway is opened from Bombay to Calcutta, and from Bombay to Madras, would there not be an alternative route for passengers through the shorter sea voyage to Bom-

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F. Hill, Esq. bay, and a very pleasant railway journey to Calcutta?—A journey; but whether pleasant or not is another question; it is one I should not like to perform myself.

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256. At any rate, any objection which the Peninsular and Oriental Company raised some years ago to reducing the price of their contract, because they must keep up passenger-boats from Galle to Calcutta by railway, would be considerably reduced when the passengers were carried from Bombay to Calcutta?—I have no doubt from all I have heard from Indian officers and others on the subject that that would be the case.

257. Therefore, would it not be prudent to postpone any definite contract between the Indian Government and with the Peninsular and Oriental Company for the service to Bombay until they were assured as to the probable passenger service between Bombay and Calcutta?—I think it would be prudent to defer entering into any permanent contract, that is to say, for a long series of years, but if the contract were terminable as our Australian contract is, upon a notice of two years, I do not think that there would be any necessity for delay.

258. When you use the word "permanent," would it not be prudent to delay any permanent arrangement for the service between England and Bombay with the Peninsular and Oriental Company, or with any Steamboat Company, until there were the means of testing what would be the facilities for passenger traffic from Bombay to Calcutta?—Certainly.

259. And if those facilities should be greater, do not you think that the Peninsular and Oriental, or any other Steamboat Company would be able to tender for much less than what they said some years ago they would tender for for the additional service to Bombay?—No doubt that would be so.

260. *Chairman.*] We have it in evidence that the line of communication between Bombay and Calcutta, and also between Bombay and Madras, will be completed within a reasonably short time from now; do not you think it is desirable for us to take measures at once for forestalling that completion, so that when the communication is opened it may be immediately availed of?—I do, no doubt.

261. *Mr. Childers.*] And not to contract for a fixed sum for a long period until that question is tested?—Not for a long period; but if the contract were terminable upon a couple of years' notice that might be done.

262. *Chairman.*] Have you a printed copy of the Messageries Time Table?—We have a return of their actual performance of their voyages; we instruct our own officers to keep a record.

263. Have you got their advertised Time Table?—No, I have not.

264. Will you be able to procure it and put it in as evidence?—Yes.

265. Do you think that if we had a weekly mail from Marseilles to Bombay it would be necessary to keep up four despatches from Southampton to Alexandria monthly?—I do not think that alteration would make any difference. The Post Office inquired of the company, some time ago, what deduction they would make from their subsidy. At that time we had three boats from Southampton in the month; and they then said that they could strike off 5,000 *l.* a year, if I recollect rightly, (and my memory is generally

very good for figures,) if we would relieve them of one of those boats. My object in making the inquiry was to see whether we could not send all our mails through France as economically as sending a portion of them *via* Southampton; and I found that that deduction, as compared with the heavy payment that we have to make to France for transit through that country, would leave us greatly the losers by the change. Time went on, and a fourth boat was put upon the Southampton service, and I think we were called upon to pay 5,000 *l.* a year for that boat; and again the question arose. I think it was when I was about to go over to Paris to attend the Postal Congress. It has always been my wish to see the whole of the mails sent through France, and again I put the question to the Company what deduction they would make if we relieved them of this Southampton service. They said that they could not reduce the subsidy at all; that there was then traffic enough by the Southampton route to require all four boats; that they could not withdraw a boat even if we withdrew our mail; and therefore they could not reduce the subsidy.

266. *Chairman.*] Looking at it, not with reference to the cost of the service, but purely from a post office point of view, with reference to the public convenience in the transmission of the mails, do you consider that it would be necessary to have four mails a-month to Alexandria from Southampton, and *vice versa*, if you had a weekly communication from Marseilles to Alexandria?—Not irrespective of expense.

267. What is the general character of the despatches which are sent by way of Southampton, as contrasted with those sent by way of Marseilles?—First, all heavy official communications go by way of Southampton, and no doubt all the soldiers' letters, (and we know that our troops are numerous in India,) otherwise they would not be conveyed at 1*d.* a-piece; then there is, no doubt, an immense number of newspapers that go that way because they are charged more heavily the other way; and I presume that the poorer class of writers who do not care much about time, and other writers, where they were not pressed for time, prefer the cheaper route.

268. Have you ever made any proposition to the French Government for reducing their rates of postage?—Yes.

269. What is the reply that they have given to you?—They do not meet our views.

270. Do they stick to the 4*d.*?—I do not say that they stick to the 4*d.*; the charge is not in that shape. They charge us so much (10*d.*) an ounce; and knowing that there are more than two letters to the ounce (in fact, there are about three letters), we charge the public 4*d.* for a half-ounce letter.

271. And the French post office take your return, I presume, of what you send?—Yes, they do; and we take their return, in similar cases.

272. They have no means, have they, as your mails are closed, of ascertaining for themselves what are the contents of the mails?—No; but if they take our accounts we take their accounts of the mails, which they send by our packets to America, India, and elsewhere.

273. *Mr. Weguelin.*] You have been asked by the Chairman whether an arrangement could be made with the French Government or the French Messageries to carry once a month, and you have informed us that the subsidy given by the French Government

Government is four or five times the subsidy given to the Peninsular and Oriental Company?—Yes.

274. You infer from that, I suppose, that the loss to the French Government must be greater than our loss in carrying the correspondence of the country to the East?—Yes.

275. Therefore, if we divide our correspondence, and one quarter goes by the French steamer, the French Government would be bearing, in point of fact, one quarter of the loss which we now incur, or should incur, if we had a weekly communication ourselves?—I cannot say that. Whatever we might pay them would be in diminution of their loss.

276. But still they would suffer a loss from it?—Yes, from their packets, I should think a very heavy loss.

277. Do you think that it would be a permanent arrangement with the French Government, and that if we depended entirely for one portion of our communication upon them, they would continue to carry our correspondence and yet suffer a loss by it?—I think they would only be too happy to continue to carry our correspondence, because it would be really no loss to them—it would be a gain. Every pound of letters that we sent by their ships would be so far a diminution of the loss arising from their subsidy.

278. Might they not say this: This service costs us so much, and that divided upon the correspondence would come to so much an ounce or so much a letter, and we call upon you, as you depend upon us, to pay us so much an ounce?—Yes, but they would call in vain; we should not listen to such an appeal.

279. And we would then have to substitute a service of our own?—Yes; and knowing that they would not drive us to it.

280. Our service is conducted, is it not, for about one-fifth of the subsidy which the French Government pay to their company?—Nearer a fourth; between a fourth and a fifth.

281. Mr. Stansfeld.] You stated, did you not, that the Peninsular and Oriental Company proposed to charge 60,000 £ a year for an extra fortnightly service from Suez to Bombay?—Yes, for two additional services in the calendar month.

282. Have you not had official communication with reference to a different and very much cheaper offer which has recently been made to the Government of Bombay?—Yes.

283. Do you recollect the terms of that offer?—Yes; 24,000 £ a year, but at a speed of only eight knots an hour.

284. That is one knot per hour lower of speed than the present, is it not?—Two knots.

285. I thought you stated that the average speed to Bombay was only nine knots?—They are bound to have boats able to run at a speed of ten knots an hour, but as I say, of course they cannot navigate in a straight line; and when you come to judge of the actual performance, you must not expect that boats able to run at ten knots an hour will perform the voyage at that speed; but they are bound to have boats that can run at that speed, and they are now subject to penalties and premiums founded upon that calculation. That system has as yet been in operation only a short time, but during that time their premiums have very considerably exceeded their penalties, showing that there is a *bonâ fide* performance at that rate.

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286. Do you remember whether in the proposal of the Bombay and Bengal Company, as I think it was called, they intimated their expectation that after a certain time they would be able to ensure a greater speed?—No, it did not come to us in that shape; all our knowledge is from an official letter from your own office, informing us that the offer had been made, the nature of the offer, and that it had been rejected.

287. At any rate, the offer was very considerably lower, being 24,000 £ instead of 60,000 £?—Yes.

288. As I understand it, your expectation is that if we were to endeavour to carry out a weekly mail to Bombay, it must result in an additional loss of charge, either to England and India conjointly, or to India alone?—Yes, certainly.

289. That you stated to the Committee as your impression?—Yes.

290. But you would not be prepared to give that as a positive conclusion?—No.

291. Your impression was founded, was it not, so far as figures are concerned, upon this offer of the Peninsular and Oriental Company to perform the service for 60,000 £?—Not exclusively upon that; I took into consideration the time that had elapsed, the increasing traffic with Bombay, and other matters of that kind, and I then formed an estimate.

292. Did you take into consideration the 24,000 £ being the offer of the Bombay and Bengal Company?—Yes; but bearing in mind that it was for a lower speed, and knowing that increase of speed is purchased by a greater consumption of coal and increased cost of navigation.

293. Then your calculation of the probable increased cost was not at all a calculation of what might be the cost of an entirely new scheme of service; for instance, such a scheme of service as that which has been put to you hypothetically by the Honourable Secretary to the Treasury?—I have allowed for that as well as I can, but as I have said I should not be very hopeful upon the subject. It would be very desirable to bring the thing to the test of actual experiment; but considering what we should have to pay to the French Government on the one hand, I should not be very hopeful of any very large saving or of any saving, but on the contrary, I should expect an increased expense so long as the Peninsular and Oriental Company are obliged to send their large and powerful ships to Calcutta; and I am unable to say when they would be able to discontinue them.

294. One of the questions of Mr. Childers had reference to the time when the railway from Bombay to Calcutta, and from Bombay to Madras would be completed, when probably that view of the Peninsular and Oriental Company would lose much of its force?—Yes.

295. But then, on the whole, I understand your evidence only to amount to a general impression that, with all those things being taken into consideration, you could not get a weekly mail to Bombay without probably some additional cost?—Yes, a cost which I have estimated in my own mind at about 30,000 £; and I can state to the Committee, briefly, how I arrive at it. The present cost of the packet services to India, China, and Australia, all of which are linked together, is, roughly speaking, 360,000 £ a year. These services now depend upon the calendar month; and so to alter them as to make them depend on the lunar month

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month, would be to add one-twelfth to the duty. Instead of 12 voyages to Australia in the year, you must have 13; instead of having 24 to China, you must have 26; and instead of 48 to India, you must have 52; so that you increase in all cases by one-twelfth; and the Peninsular and Oriental Company have stated that they would be prepared to make that addition to the service for a corresponding addition to the subsidy; and that is one-twelfth. There you have 30,000 *l.* added to the 360,000 *l.*; but of that 30,000 *l.*, 10,000 *l.* has relation to the Australian service alone, so that you must strike that off, bringing the sum down to 20,000 *l.* Then, I estimate that there would be an increase of postage, even according to the present scale, from the increased frequency of transmission, and the improvement which would take place in this transmission; and I estimate that this increase would be about equal to the 20,000 *l.* Thus all that remains is the increase in the demand for the packet service by having the services to India entirely to Bombay, instead of alternately to Bombay and Calcutta; and that I put down this increase at 30,000 *l.*, which is one-half of what was asked four or five years ago, but somewhat more than is asked for a service at the rate of eight knots an hour.

296. That calculation is based upon the present contracts continuing precisely as they are, with the exception of the additional mails to Bombay?—Yes, together with the alteration from the calendar to the lunar month.

297. It is not based at all, as I understand the calculation, upon the hypothesis of a complete change of the system of postal communication?—If you call it a complete change, the alteration would be of that nature. I am not aware of any other change that could be attended with a saving of expense.

298. There is the change, for instance, of the employment of the French service?—Yes; they would come in as competitors.

299. Mr. Childers.] They are competitors now, are they not?—Yes; but they then might tender to us to perform all the services.

300. Surely, if you took off the fortnightly boat from Galle to China, that would be a saving of some kind, would it not?—If we took it off absolutely, it would, but if you merely use the French boat instead of an English boat, I cannot say, with certainty, that it would save anything.

301. According to your present calculation there is a loss, is there not, on the China service of 34,000 *l.* a year?—Yes.

302. If the China contract were made for one boat, instead of two boats, you would not suffer the whole amount of that loss, would you?—I cannot answer that question.

303. Probably you would not?—Probably not; but it depends much upon the requirements of commerce.

304. On the other hand, the employment of the French service, with the payment to the French Government, involves no loss at all?—It involves the payment.

305. That is the difference between the amount of the postage received upon the letters and the amount to be paid to the French Government?—Yes; we put the cost of the service on one side, and the amount of the postage on the other side. If we employ the French boats we must, either to the company who tender to perform the service, or to the French Government, according to our present convention, pay so much a year.

306. Which is no loss, because you get the postage?—Yes; we get the postage in all cases.

307. In the other case, you not only pay to the French company the amount of postage, but you pay something, which in the technical language of the Post Office, is called loss?—I think you will find that it comes to the same thing.

308. Mr. Weguelin.] You have an arrangement, have you not, with the boats from Belgium?—Yes, we have.

309. But the Belgium packet service is in the hands of the Government?—It is so.

310. It is not a contract service, I believe?—Not in the ordinary sense; it is with the Belgian Government.

311. They support it, do they not, at some loss, for the sake of maintaining a certain amount of naval service?—That is supposed to be so, but we have of course no absolute knowledge on that point.

312. Mr. Childers.] The Government themselves in that case are the contractors?—Yes; they placed themselves in the position of private parties tendering, and they made us a very advantageous offer, which was accepted.

313. Mr. Weguelin.] Do you think it would be wise or politic for this country to depend upon France for a portion of its communication to its eastern possessions?—I see no objection to that; they have to depend upon us for the larger part of their communication.

314. Do you think that, as a general rule, it would be advisable?—Yes, I do not see any objection to it.

315. Either in peace or in war?—In case of war some temporary difficulties might arise, but I think they would not be sufficient to deter us from using their boats.

316. And do you think that it would be a dignified proceeding on the part of this country to throw a portion of the loss that it suffers from its postal communications with the east upon the French Government?—I do not think it would be possible, however undignified it might be; I think that the French would say nay to any proposition of that kind.

317. Mr. Childers.] Is it not the case, with respect to South America at this moment, that we and France have an alternate fortnightly communication?—Yes, and we work very harmoniously together.

318. And it is the case also with respect to the West Indies, that we and France have communications which fit into one another?—Yes.

319. That is also the case, I think, with respect to the West Coast of Africa; we and France have a line of communication?—No, I think not.

320. Not to Senegal?—I think not; there was a Portuguese line, but we found it so irregular that we could not use it.

321. But with respect to the West Indies and South America, we alternate with France?—I should hardly say that we alternate with them with respect to the West Indies; we send letters by their boats which go there; but with respect to Buenos Ayres, Monte Video and Brazil, it is a regular alternation.

322. Mr. Weguelin.] The original position was this, was it not, that the French Government having established those lines, not for the sake of profit or loss, but for reasons of State, with which we need not interfere, we encourage that course of proceeding on the part of the French Government by coming in and bearing a portion of the loss which they incur by supplying them with a portion

portion of the correspondence which otherwise would be carried by our own vessels?—Yes; we encourage them in that way; but not nearly to the same extent to which they encourage us by employing our boats, which they use far more than we use theirs.

323. Because they find it profitable to do so?—Yes; and that would be our motive for employing theirs.

324. Mr. *Childers*.] Did we not, for many years, run alternate contract boats with the American Government, with the Cunard line, and the Collins line?—Yes.

325. That was never looked upon by the Post Office as a disadvantageous arrangement, was it?—No.

326. Mr. *Weguelin*.] Has the Collins line been subsidised by the American Government?—Yes.

327. What was the subsidy, as compared with ours?—I do not know.

328. Mr. *Stansfeld*.] You read a letter of the Treasury in 1856, stating their view of the quality of the interest of India and England in the China mail, but you did not state whether that view was acquiesced in, except so far that it was submitted to by the Court of Directors at that time?—We have no reason to suppose that it was not acquiesced in; but any reply on the subject would not come to us; it would go to the Treasury.

329. Are you not aware that that decision was protested against, and was only submitted to it?—No.

330. *Chairman*.] In the event of the service being established between Suez and Bombay, as proposed, would there be any objection on the part of the Post Office, with the view to saving time to the vessel not calling at Aden?—None, whatever.

331. Does the contract with the Cunard Company leave a loss, or does it result in a gain?—A large loss; a loss of nearly 100,000 *l.* a year.

332. What loss does the Brazil service leave?—It does not produce any loss now; it is self-supporting.

333. What is it in the case of the West India Pacific service?—The West Indian service is attended with a heavy loss, about 80,000 *l.* a year; but the Pacific service is nearly self-supporting.

334. So that, in point of fact, the loss upon the India service proper, compared with those you have mentioned, is the least largest loss sustained in the case of any contract?—It is about the same as the West Indian loss.

335. Would the Post Office consider the question of the profit or loss upon the India service by itself, or would it take it into account in conjunction with the total loss sustained by the Post Office upon its whole business?—The Post Office is very much averse to loss of any kind on any part of its business; it is a constant object with us to diminish and ultimately to do away with loss. As regards the Cunard service, we lately served them with notice that at the earliest possible opportunity we should terminate their contract; and with the termination of that contract we fully expect that the present heavy loss will also wholly terminate.

336. Have you any objection to give the same notice to the Peninsular and Oriental Company?—I should have no objection, except for the reason that I have stated, that if we do so presently.

maturely, we may get into a scrape, and have to pay a great deal more than we do now.

337. In point of fact, the Peninsular and Oriental Company have the whip-hand of the Post Office?—Just so; but seeing how they have got the whip-hand of us, they have behaved with great forbearance and liberality.

338. Mr. *Weguelin*.] Has the Post Office now a contract with the French Company Government for an alternate communication with Brazil?—No.

339. Mr. *Childers*.] You have an arrangement with the French Government under which they send your letters?—Yes, we have an arrangement under which they send our letters, and they have an arrangement under which we send their letters.

340. Mr. *Weguelin*.] Is it a contract at so much a year?—No, we pay so much an ounce; we pay them 12 *d.* an ounce, and they pay us 12 *d.* an ounce.

341. Do they pay you anything different from what you charge the public?—Yes.

342. What do you charge the public?—That is different to different places. To the Brazils and the Argentine Republic we charge 1 *s.* per half-ounce letter.

343. In the case of your making an alteration in the postal service to the East on the same principle as the service to the West is conducted, would you contemplate making a contract with the French Messageries Impériales Company, or with the French Government?—I think the best way would be, as I say, so to frame our tenders that the Messageries might make an offer, and if their offer as a company were more advantageous to us than the terms under which we can send letters by means of the convention, we should accept their offer.

344. Do you think that it would be an equitable thing on the part of the Government that a company which is subsidised at the rate of four or five times in the way which the English company is subsidised, should be allowed to compete on the same terms for the carrying of the mails?—I do not see any departure from equity in that matter.

345. So that you see no inconvenience, in short, in this country giving up its whole postal service to India, provided the French Government would bear the loss which is now incurred by the Post Office in carrying the mails?—As that is not yet in contemplation, I would rather not give an opinion upon it.

346. You say that you see no inconvenience in contracting upon equal terms with the French Government and with an English company which is subsidised at about one-fourth of what the French company receives?—No, I do not see any objection whatever.

347. From that the natural inference is, that we might give up the whole of our service with India, provided the French Government would bear the loss which the Post Office now incurs?—That does not necessarily follow, in my opinion.

348. *Chairman*.] Is there not some difference between a partial use of the French service and the entire use of it?—Yes; it may be of extreme importance that, periodically, we should have the means of sending Government despatches by our own boats.

349. Mr. *Weguelin*.] What interval would you like to have between the communications with

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350. *Mr. Childers.*] You consider that the last course to take would be to give the Messageries an opportunity of tendering for the alternate service?—Yes.

351. You would not exclude, of course, the answer of the French Government, if they would agree to a rate upon letters for the alternate service?—There is no occasion to put that question, because we have it in the convention that we are both bound to carry letters for each other.

352. For the alternate service once in four weeks instead of once a month?—No.

353. Probably it would be prudent to ask that question before anything was definitively done?—Yes; I think it would.

354. *Chairman.*] One word with regard to the Italian route; have you anything further to say or to put in with reference to the proposal which has been made with respect to utilizing the Italian system?—No, nothing further; we are waiting now for the report of Captain Tyler.

355. Upon reading the correspondence, may we not assume, as the conclusion to which it brings us, that so long as the communication over Mont Cénis is incomplete, and so long as there is only a single line of railway from Turin, or rather from Susa to Brindisi, it is hardly worth the while of the English Government to pursue a negotiation having for its immediate object the substitution of Brindisi for Marseilles as the port of departure for Alexandria from Europe?—That is our opinion as regards Mont Cénis; but whether it is necessary to require that the lines should be made double is a question upon which Captain Tyler will report.

356. You are waiting then for his report?—Yes.

357. And therefore now, probably, we may arrive at the conclusion that 15 hours is the largest amount of time that would be saved by using Brindisi?—No; we expect a larger saving in time than that; 31 hours.

358. At the present moment is not that the expected saving?—At the present moment we think that the probability is that instead of there being a saving of time, taking irregularities into account, there would be a loss.

359. Has any suggestion been made to the Post Office with regard to sailing from any other port in Italy than Brindisi, for the purpose of sending on the mails to the East?—Yes.

360. Has Naples been named?—Yes.

361. Does that come from any authority?—I know from personal conversation with Captain Tyler that he has a very good opinion of Naples, and I am inclined myself to think that the chances are in favour of Naples.

362. At the present moment the fact is that you are waiting for a final report from Captain Tyler?—Quite so.

363. *Mr. Childers.*] Is it not the case that one of the main objections to using the Brindisi route has been that at present there is no day mail from Paris to Italy?—I cannot say that that has been considered a main objection.

364. Has not that objection gone through the whole of the correspondence with the head of that department in the French Government?—Yes, with the French Postmaster General.

365. Has not one of the grave objections been that the route through Italy would involve

sending the letters from here in the morning instead of sending them in the evening, there being no day mail from Paris to Turin?—That is an objection, but not a very material one.

366. That clearly is an objection which in process of time could be got over?—Yes.

367. With regard to Brindisi itself, is it not the case that the Post Office are satisfied that for landing and embarking sufficient facilities would be found there?—At present the case is doubtful. The Admiralty report that Brindisi is a suitable harbour for such vessels as would be required for the Indian service, but on the other hand there is a report from a gentleman who was employed by the Peninsular and Oriental Company to survey the ground, who seems to have made a very careful examination, and from his report one would suppose that the harbour requires a considerable expenditure upon it before it would be ready in all respects for such use.

368. I suppose the effect of going from Brindisi would be that you would get some further competition for the Mediterranean traffic?—If we went to Brindisi, we should get one kind of competition, but we should lose another.

369. You would lose the Messageries?—Yes, we should lose the Messageries; and we should, no doubt, increase largely the sum which the Peninsular and Oriental Company would demand for the service. If we touched at Naples or Reggio, then the boats, both of the Peninsular and Oriental Company and of the Messageries, without deviating from their course, might readily take in the mails.

370. Is not Reggio a little nearer Alexandria than even Brindisi?—Yes, a trifle.

371. And Reggio would be quite convenient for the Peninsular and Oriental Company?—Quite so; but then the railway does not at present go to Reggio.

372. Do you know when the railway is expected to be finished to Reggio?—No; the matter is so uncertain that I could not venture to say.

373. It has been suggested that the line up the Tyrol will be finished within a short time, and that that route would be available as an alternative route; has that ever been considered by the Post Office?—No.

374. Has the line over the Brenner and by Verona been considered?—No.

375. If that line were available, you could then be entirely independent of France on this side of Alexandria?—Yes.

376. Your mails then would go through Belgium?—Yes, through Belgium and Germany.

377. That would also be the case if the project were carried out of conveying the mails over the Saint Gothard, through Switzerland?—Yes, as far as that particular alteration goes.

378. Which is now in contemplation by the Italian Government?—I am aware that it is. We go to Switzerland, at present, by way of France.

379. But you have an alternative service by way of Belgium, have you not?—Yes, we have.

380. *Chairman.*] Will you furnish the Committee with the printed time-table of the Messageries Company, and the table of arrivals and departures, which I think you are now supplied with by your mail agents?—Yes, I will put it in.

381. Will you also put in in detail the last annual adjustment of expenditure upon the Indian mail services?—Yes, it shall be prepared.

Captain JAMES RENNIE, C.B., called in; and Examined.

382. *Chairman.* You were formerly in the Indian Navy, were you not?—Yes.

383. And you have been employed for some time at Calcutta?—Yes, in charge of the Marine Department of Calcutta for four years.

384. You have seen a great deal of service upon the southern coast of Arabia, have you not?—Yes, and in the Red Sea.

385. And you can inform by-and-bye what is the general character of the southern coast of Arabia for telegraphic purposes?—Yes, all along the south coast.

386. With regard to Aden, are there any reasons in your mind why, if possible, with a view of expediting the service, steamers bound from Suez to Bombay should not call at Aden?—I should say that certainly there are objections to their calling at Aden.

387. What are those objections?—Aden is a tidal harbour, and deeply-laden vessels, such as the Peninsular and Oriental Company's vessels are, cannot leave Aden at all times of the tide, so that any postal communication between Suez and Bombay is liable to from six to ten hours' detention from tide alone. And, in the second place, they cannot leave at night, or they very seldom do; they could not do it without risk, and they certainly could not go in at night without risk.

388. Have you considered the question of the establishment of a line of packets between Suez and Bombay?—I made it my special study while in charge of the Marine Department in Calcutta, and I brought it prominently to the notice of the Financial Member of Council, Sir Charles Trevelyan, pointing out what I conceived to be the very inadequate return that we got for the money spent upon the postal communication between England and India, and strongly recommending that the service should be remodified.

389. Was that representation made in an official form?—No, it was made in a demi-official note, which he informed me he had sent on to Sir Charles Wood.

390. Do you happen to have kept a copy of that communication?—No, I am afraid not.

391. What was the general view at which you arrived?—The general view was that a postal service ought to be a distinct one, entirely separated from the passenger and cargo service; that by placing vessels of superior speed upon the line direct to Bombay, without reference to the China mail, which might be included afterwards, there was nothing to prevent a weekly communication being kept up between England and Bombay in some considerably less time than is done at present.

392. How many days should you say?—My calculation is that there is nothing to prevent vessels running the whole distance at the rate of 12 knots an hour, or 300 miles a-day. I have not got the distances from Marseilles, but my calculation was that we should land our mails always on the morning of the 17th day. I have a memorandum upon the subject, which I shall be happy to put in.

393. What sized steamers do you contemplate employing?—I think it could be easily performed with vessels of about 1,600 tons, with about 450-horse power.

394. What consumption of coal do you con-

template?—By the present improved system of using coal, it could be done with somewhat less consumption than is done now by the Peninsular and Oriental Company's ship. I should calculate about 2½ lbs. per indicated horse power.

395. Your idea was that those steamers might be so employed to run between Suez and Bombay, and *vice versâ*?—Yes, in ten days. There would be nothing to prevent those steamers conveying passengers and a little cargo, as the whole of the space would not be occupied by the mails, and any passengers who chose to push on through Egypt in time with the mails, could always be conveyed on by them. There would always require to be one spare vessel at Suez, and she could load with 40 or 50 tons of packages, which most of the outward cargo consists of, and be ready to weigh the moment the mail arrives at Suez.

396. And there being weekly communication, the detention in Egypt would be of much less moment than now?—Yes.

397. Probably, many persons going to India would prefer to stay a week in Egypt, to see the sights of Egypt?—Yes, they would not be hurried through; they would, probably, take two or three days in Egypt. The Southampton steamers must continue for the general cargo, so that people doing it in that way, may go out quietly to Egypt, remain in Egypt a few days, and then go on by the mail.

398. How could the cargo go on if the steamers were to carry only light goods?—There would have to be two totally distinct services if they are to be performed satisfactorily.

399. Do you think that the establishment of a thoroughly complete mail service between this country and India is of sufficient importance to justify the establishment of it upon what would appear to be rather an expensive footing?—Unquestionably.

400. You have been a considerable time at Calcutta; can you state what is the general feeling of the mercantile community there with regard to the present service?—We have virtually only two mails a month to Calcutta, because the second Bombay mail is always delivered before the letters arrive by the steamer which comes direct to Calcutta.

401. Generally they are within a day or two of each other, are they not?—Generally a day or two before. The Bombay mail, of a week later, is generally delivered at Calcutta from one to two days before the Calcutta direct mail arrives, so that, virtually, we have but two services to Calcutta.

402. That is the Marseilles portion?—Yes; both mails go by Marseilles; but the Marseilles and Calcutta direct mail, without going to Bombay, comes round by Ceylon, and we only get these letters delivered two days after the receipt of those by the later steamer from Marseilles *via* Bombay. It is paying all that money for a service which is not rendered.

403. That is to say, a service from which the community get no benefit?—We get no benefit from it. At Madras I do not think there is more than from 12 to 18 hours' difference; so that, even at Madras, they derive only 18 hours' benefit, but nobody else does.

404. As far as the expenditure of money goes, the

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the money that is expended upon the maintenance of the Madras and Calcutta line from Aden is, in your opinion, money thrown away?—Quite so, so far as the postal arrangements are concerned.

405. Is the community at Calcutta tolerably satisfied at the present time with the manner in which the Peninsular and Oriental Company performs its service?—I have nothing personally to say against the Peninsular and Oriental Company, but complaints are tolerably loud, I think, that the service is not performed satisfactorily.

406. Of course this Committee takes no cognisance of passengers' comforts, or the complaints of passengers, but the speed of the vessel is all they have to deal with; what is your opinion with regard to that?—I think it is notorious that the speed is disreputably slow upon the Calcutta line.

407. How long is it since you were in Calcutta?—I left two years ago.

408. Have you not heard of any material change for the better since you left?—No, not on the Calcutta line, but there has been a decided improvement on the Bombay line. They are keeping very good time on the Bombay line.

409. Mr. Childers.] You stated that you thought there were disadvantages in touching at Aden between Suez and Bombay; would not the effect of the steamers not touching at Aden be that there would have to be a much larger stock of coal kept at Suez?—The vessels that I propose to run would carry coal for the whole distance without requiring to coal at Aden, and the difference of expense to them from the best information that I can obtain would be about 15 s. per ton.

410. But would not the result of their not stopping at Aden be to require a much larger stock of coal to be kept at Suez?—Not for the mail steamers. It might or might not; but that would be no very great consequence.

411. Do you think that large steamers would run from Bombay to Suez and back again without coaling?—No, they would coal at Suez.

412. Do you know anything of the comparative price of coal at Suez and at Aden?—I think from the inquiries I have made that the price of coal at Suez would on the average be 15 s. per ton dearer than at Aden.

413. Have you taken into consideration what that would come to in a year?—Yes.

414. How much would it be?—I suppose that my vessels are to expend 500 tons of coal upon a trip.

415. Upon 52 trips that would amount to 26,000 tons?—Yes.

416. That would be an additional cost, therefore, of 20,000*l.* a year upon coal?—Yes, probably it would be so.

417. £. 20,000 is a serious difference for the Government to pay, is it not?—I am not talking about expense, but of the necessity of improving the communication; you certainly must have to pay for it.

418. Mr. Weguelin.] You stated that the rate of speed of the Peninsular and Oriental boats between Suez and Calcutta was disreputably slow; does that mean that the company has not kept the time fixed by its contract?—I have not got a copy of the contract to refer to, therefore I cannot say.

419. Or does it mean that the rate of speed fixed by the contract is in the opinion of the community disreputably slow?—The rate of the

contract is too slow, and my belief is that the contract is so worded, that they take advantage of it, to keep time by running about eight miles an hour; that they are allowed too many hours of stoppages upon the route, much longer than is necessary, so that they can complete the voyage within their contract time at about eight miles an hour; but I am speaking of course under correction.

420. Would it be the interest, do you suppose, of the Post Office or the Admiralty, who supervise this contract, to make such a disreputable compromise with the Peninsular and Oriental Company?—I do not consider that it was disreputable at the time it was made.

421. I am referring to your term of disreputably slow?—I mean disreputably as compared with the speed that they are running between England and America on that postal service, or that the French steamers run.

422. Have you ever made any comparison between the two?—Yes.

423. Are you prepared to put in an exact comparison between, for instance, the Brazil line and this country, or we will say the Cunard line, which is supposed to be the quickest?—I could put it in if I could get the returns.

424. Have you seen the returns?—I see the time occupied by the Cunard line in running between Halifax and England, and I compare that with the time occupied by the Peninsular and Oriental Company between Suez and Calcutta.

425. Have you seen the returns between England and Halifax?—I see the weekly returns of vessels when they come in.

426. Have you seen also a return of the time occupied on the outward voyage?—I do not know that I have seen that; but the Indian Sea from my knowledge is admirably adapted for steam navigation.

427. There is this to be considered, is there not, that the coals taken in at Liverpool or at Halifax are perfectly fresh?—Yes; that makes a very great difference.

428. Whereas the coals at Aden and Bombay have had a long voyage in a tropical climate, and have been left in a tropical climate, and have lost much of their strength?—Yes; but on the line which I propose we should take in our coals at Suez, and they would not have been very much exposed. The consumption would not be very great, so that there would be no necessity for keeping a large stock. There is the railway across from Alexandria, and you can arrange for your coal with as great certainty as you can for coal from Wales at Liverpool.

429. Mr. Laird.] Do you know any vessel of 1,600 tons and 400-horse power going a distance of 2,800 miles with 500 tons of coal at the speed you have mentioned?—I have had an offer from a builder to prepare such vessels.

430. Do you know the quantity of coal taken by the New York steamers?—No; I do not know that.

431. The distance is about 2,800 miles, therefore very nearly the same distance as your proposed steamers would go?—Yes.

432. And you calculate upon a speed at about 12 knots?—Yes, at about 12 knots.

433. Do you know any vessel yet built, of the best kind, and with all the improvements that have been adopted, that can go at that speed per hour

hour with such a consumption of coal as you calculate?—I am informed that vessels which are built for the New Zealand service from New Zealand to Panama are capable of performing that speed with that consumption of coal.

434. We know that offers are made very often to do those things, but do you know of any instance in which it has been done?—I say that I do not know of any case in which it has been done, but I am quoting the opinions of eminent shipbuilders who tell me that they are prepared to build vessels capable of doing it.

435. But you cannot say that it ever has been done?—Not from my personal knowledge.

436. Do you know the amount of coal that is required to drive one of those vessels across the Atlantic at that speed of $12\frac{1}{2}$ knots an hour?—No; I should think it would be very much more than I mentioned.

437. Mr. Childers.] Do you state that the postal service from Panama to New Zealand is performed at 12 knots an hour?—No, it will be very much slower; but the vessels are capable of going at that speed.

438. Are any such vessels contracted for; have any builders contracted to build them?—I am not aware whether they have or not. All I say is, that I have a letter in my pocket from a builder who guarantees to do it.

439. Do not shipbuilders sometimes guarantee a good deal?—I am connected with a ship-building yard myself, and we always perform what we guarantee.

440. Mr. Laird.] I presume you are aware that the Peninsular and Oriental Company, as has been stated to-day in evidence, have kept their time according to the contract?—Yes.

441. And that vessels in order to go at 10 knots average have to go at a speed of 12 on trial?—Yes, I should think so.

442. It is generally considered, is it not, that you require a speed of at least two knots more at measured mile than you do to make an average?—Yes.

443. Then vessels such as you have described would require a speed at measured mile and loaded of $14\frac{1}{2}$ knots?—Yes.

444. It is a very difficult thing, as you are aware, to get that speed?—I should think that the French boats are not considered superior to the English boats. I suppose that the English builders would be able to build equally as good boats as those employed by the Messageries Impériales Company, and I know that in one of their vessels, in very moderate weather, with a very small amount of sail, we ran 337 knots in 24 hours, and we did 240 knots against a heavy north-wester in the Red Sea.

445. Can you tell us what their average speed is?—The average on that passage was very good indeed.

446. But can you give us their general average?—I have no returns from them, I only know what I saw performed; when I was on board one of their vessels, we certainly averaged over 13 knots an hour the whole way from Calcutta to Suez.

447. Sir Charles Bright.] What was the name of the vessel?—The “Cambodge” was the vessel, from Galle to Suez, the other was the first they put on the line, the “Erymanthe.”

448. Mr. Childers.] In your opinion, those French boats in those seas do good service?—Excellent service.

449. And that we should not do wrong to take advantage of them to some extent for the Indian mails?—I think most decidedly, that we should take advantage of them.

450. Sir Charles Bright.] Do you think that their coaling arrangements at Aden are better than ours?—No; nothing can be superior to our coal arrangements at Aden.

451. But they do coal their ships more quickly, do they not?—I should not think so; the coaling arrangements are all conducted by the same party.

452. Mr. Weguelin.] Are you aware how often the boats of the Peninsular and Oriental Company beat those of the Messageries Impériales in speed?—I should think never.

453. Have you never seen a return of that kind?—I know that we had a race with one of the Peninsular and Oriental boats on one occasion, and we beat her; I should think never, because the Messageries Impériales work up to their power, which the Peninsular and Oriental never do on the Calcutta line; to the best of my belief, lately they never have. I made one voyage with the Peninsular and Oriental from Suez to Calcutta, and we averaged 300 miles a day.

454. That was as good a performance as the French boat, was it not?—Not quite, but it was a very good performance.

455. In short, taking the bad and the good together, on the average, do you think the Peninsular and Oriental Company do their service as well as the Messageries Impériales?—Most unquestionably not; I do not want to throw the slightest reflection upon the Peninsular and Oriental Company; I believe that they perform their contract service, and that they keep to time; but the contract itself is what I complain of, as being an improper contract, and I have no doubt that the Peninsular and Oriental Company would be delighted to enter into a new one.

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Mr. RICHARD RANDALL, called in; and Examined.

456. Chairman.] WHEN will the East Indian Railway Company's line probably be opened to Jubbulpore?—In the course of next year.

457. What will be the distance from Calcutta

to Jubbulpore?—Eight hundred and fifty-four miles by the main line; and when the Chord line is finished, 794 miles.

Mr.
R. Randall.

ROBERT KNIGHT, Esq., called in; and Examined.

458. Chairman.] YOU have resided for some years at Bombay, I believe?—Yes, for 17 years.

459. In what capacity?—I was for the last 0.43.

seven years editor of the “Times of India;” prior to that I was in business in Bombay.

460. You have therefore had peculiar opportunities

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tunities under those circumstances of making yourself acquainted with the views of the Indian community upon all subjects?—Yes.

461. What is the opinion of the community generally in India upon the subject of their postal communication with this country?—I can speak with confidence as to opinion in India upon the subject—

462. Do you speak with reference to Bombay only?—No, with reference to all India; for as editor of the paper, of course I saw all the journals of the country, and they teemed with complaints upon the subject. There is but one feeling in India, that of profound dissatisfaction, from the Government downwards.

463. What were the grounds of the dissatisfaction that was expressed?—Whatever the contract time may be, there is a general impression in India that the mails are not carried with such rapidity as they ought to be carried. I have not had the advantage of seeing the papers lying on the table, but I took out from "The Times of India" a day or two ago, the time occupied by the Bombay mails *via* Marseilles in the last 12 months, I mean the mails from England to Bombay *via* Marseilles; and with the permission of the Committee, I will read those dates. I may say that, unfortunately, I differ from a great deal of Mr. Hill's evidence, and I should like to reply at length to it if I have the opportunity. The mail of December the 19th was just 27 days in transit at the finest period of the year, when from Suez to Bombay the sea is a mill-pond, yet 27 days was occupied in the transit. The next mail was 26 days, the next 24 days, the next 26 days, the next 24 days, the next 25 days, the next 26 days, the next 22 days, the next 23 days, and the next 24 days. Then came the good luck of the monsoon for the Company, and now, as their vessels were driven by a powerful south-west wind, they managed to do it in 21 days for six successive mails; but as soon as the monsoon was over it was again 24 days, 23 days, 25 days, 27 days, 22 days, 27 days, 26 days, and 26 days. I am neither an engineer nor a shipbuilder, but I think there is no one sitting here who knows anything of mail communication but must be under the impression that there is something wrong here upon the face of it. I have taken the whole season through, and find that it gives an average of 24 days and 13 hours for carrying the Marseilles mail from London to Bombay.

464. You apparently complain of the irregularity more than anything else?—It is pretty regular in regularity. As I have stated I am not able to say what steamers are capable of doing; but I have been reading for years upon this subject, and I find a speed talked about of 12, 13, or 14 knots, while I find that the average speed on the Bombay line is less than nine knots. We are under the impression that we ought to be very much better served, and that if there were any competition we should be better served.

465. Your complaint resolves itself primarily into this, that, however regularly the service is performed, it is performed at a rate of speed which, although in accordance with the provisions of the contract, is below what the community would have a right to expect in the present state of science?—Quite so. I say that the conviction in India is universal, from the Government down to the lowest member of the community interested in the matter, that the service is not

so efficient as it might be. There is the profoundest dissatisfaction, moreover, on our side of India from our being completely at the mercy of the Peninsular and Oriental Company with regard to the passenger traffic. I heard it stated here this morning that this Committee could not enter into the question of passenger fares, but you do so in the case of railways, and if you give a subsidy to a steamboat company, equal to a 10 per cent. dividend upon their capital, as you do to the Peninsular and Oriental Company, you virtually give them a monopoly of the line they navigate.

466. In what respect do you connect that with what I may call passengers' comforts; do you complain of the want of speed in the conveyance of passengers, or do you complain of the want of the comfort of passengers while on board the steamers?—We are entirely in the hands of the Peninsular and Oriental Company, so far as Western India is concerned, and if the public funds were at our own disposal, and the Lords of the Treasury confined themselves simply to the service from this side, which should start an independent service from our side, and under no circumstances give the Peninsular and Oriental Company the contract. Sir Bartle Frere, the governor of our presidency, himself told me (I am speaking from personal knowledge of the opinion of our society) that he thought it highly undesirable the present state of matters should last. The effect of it is, that the Peninsular and Oriental Company charge whatever they please for the transit of passengers. It is a consideration of no consequence to Indian merchants, but it is a most vital matter to the 10,000 officers of the Indian Army. It is frequently death to an officer of the Indian Army, who has, perhaps, a wife and children dependent upon him, to force him round the Cape, while he cannot get home in any other way from the extortionate charges of this company. He cannot get home by their vessels without plunging heavily into debt, and the company will take no second class passengers. I have tried on some occasions from motives of charity to get second class passages for individuals, but they refuse to give them as a matter of policy, while all competition is forced out of the field by the heavy subsidy which the Company derives from the Government. Of course that is not felt here, but if we were legislating upon the matter in Bombay we should immediately start a rival company, as the Americans started the Collins line, to teach the Cunard Company moderation. It is only 12 months since that, on behalf of a company in existence, with a fine fleet, I made a proposal to the Post Office, to establish an alternate fortnightly service from Marseilles to Bombay if they would give us the same subsidy which they pay to the Peninsular and Oriental Company. We were prepared to start the service within two months.

467. You mean to run in *quasi* competition with them at different times?—Yes, alternately to Bombay. If the Peninsular and Oriental Company ran one week we would run the next. I had not the slightest personal interest in the matter, it was taken up by me on public grounds.

468. That was a proposition made on behalf of the Bombay Company, was it not?—It was made on behalf of the British India Steam Navigation Company. When I told Mr. Hill I was prepared to make a tender of the kind he said, "It is useless to do so, because there is a resolution

tion of the House which requires that any contract shall lie upon the table of the House of Commons a full month." We could not come forward openly to compete upon the mere chance of success, because, if we did so, the Peninsular and Oriental Company would have run competing steamers with us upon the Indian Coast.

469. Of which the public would have the benefit, at your expense?—Not eventually; the subsidy being given exclusively to the Peninsular and Oriental Company precludes anything like a cheap service in India; the Company is too powerful for the interests of India. The pressure is not felt here, but it is felt bitterly there.

470. What is the course of dealing which you, representing Indian feeling, would suggest?—Let the Peninsular and Oriental Company continue its fortnightly service, but under no circumstances give the alternate week to them. Give us the same terms as you give them, and we will carry on the alternate service, and you will have a better service.

471. You have, probably, heard to-day a suggestion made that there should be a weekly service from Suez to Bombay; am I to understand that you would suggest that, in inviting tenders for that service, the parties shall be requested to tender for alternate weeks, so that there may be competition?—I am hardly prepared to say how it should be done; but under no circumstances should we remain as we are now, at the mercy of the Peninsular and Oriental Company, by a heavy subsidy being given to them for the exclusive carriage of the mails. And it seems to me only fair and just, as there is an expenditure of Indian money as largely as of English money, that Indian wishes should be consulted in the matter. I am sure that, if we had the conduct of our own finances, we should under no circumstances give an exclusive contract to the Peninsular and Oriental Company for the weekly service.

472. I understand you to suggest that it would be desirable that the Indian Government, either at Calcutta or at Bombay, should be empowered to enter into a contract there for their own service?—That has occurred to me as probably the wisest plan. Let the Bombay Government be empowered to form a contract for a fortnightly service, and the Peninsular and Oriental Company be excluded from tendering for it.

473. Do you think that that would be for the interest of the public?—I am sure it would eventually.

474. Is it not possible that the despair of the Peninsular and Oriental Company might under the circumstances lead them to make a very suitable tender as far as the public is concerned?—The Committee will pardon me expressing my own surprise that I have heard so much this morning about the cost of the mail service. Commerce waits on communications. It is not a question of what it costs; we shall come probably to having a mail service every two days to India, but one must have lived in India to understand with what severity the present state of matters presses upon the poorer part of the Anglo-Indian community; and when I say "poor," it is comparatively few of our own community who are wealthy. I do not know much of the legislation of this country, but I believe that, in the case of railways, you insist upon their carrying passengers by third class trains; and if you give the highway to India into the hands of a single company, you must do something, in

some way or other, to make them carry the servants of the Government, who are generally poor, upon reasonable terms.

475. Probably you see some difference between the case of a railway company, which has compulsory powers given to it, and that of a steamboat company, which is simply rewarded by payment for performing a particular service over a route which is open to every one?—But the route is virtually closed the moment you give the subsidy.

476. That is to say, you put them in a position to make much better profits than other parties?—Yes; the Peninsular and Oriental subsidy amounts to nearly 10 per cent., I think, on their capital, and what company can compete with them? If you will allow me, I will read a few words from a memorandum which I have with me, showing the cruel way in which this monopoly is made to press upon Bombay. It is a memorandum which I drew up upon the subject a few months ago: "The directors of this company simply know that Bombay passengers have no means of getting to Suez but by their boats. Let the reader who would know the extent to which the community of Western India is wronged by the Company, glance at the following comparative table of fares and distances: "From Suez to Bombay, a distance of 2,972 miles, "or a 13 days' voyage, the lowest fare charged "is 75*l.*; Suez to Madras, 3,987 miles, and 20 "days, 75*l.*; while from Suez to Calcutta, which "is 4,757 miles, and 23 days' journey, the fare "is but 80*l.*; only 5*l.* more than is charged "from Suez to Bombay."

477. Sir Henry Rawlinson.] What is the actual difference of mileage?—There is 1,800 miles difference, while they make the Bombay passengers pay within 5*l.* of what they charge Calcutta passengers.

478. Mr. Weguelin.] Is their greater competition to Calcutta than to Bombay?—There is the Messageries Impériales competing with them.

479. Chairman.] What is the fare now by the Peninsular and Oriental Company's boat from Suez to Bombay?—It has been reduced a trifle. "The charges upon the Bombay line were 5*l.* 15*s.* per day, while upon the Madras and Calcutta lines they were but 3*l.* 15*s.* and 3*l.* 9*s.* respectively." I speak before this Committee as representing the feeling of India, and I say that the Company's monopoly is crushing upon men in India, who constantly have to come home, with their wives and families, in search of health.

480. Your statement is that this arises from the fact that the Peninsular and Oriental Company possesses a monopoly resulting from the money-payment made to them?—Exactly so.

481. Mr. Weguelin.] That is to say, the Company receiving the subsidy are forced to charge a higher rate of passage-money because they receive the subsidy?—No; as the Company receive a heavy subsidy, they have a dividend upon their capital before they start, and so defy all competition; no one can compete with them.

482. You say that the subsidy amounts to 10 per cent. upon their capital?—Yes; it is about that, I think.

483. Are you at all aware what it costs per annum to sail a steamer?—No.

484. Mr. Laird.] You stated, did you not, that the Peninsular and Oriental Company perform their speed according to the contract?—I doubt it very much. I said they probably perform

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form their contract fairly, but I doubt, much doubt, whether the evidence which Mr. Hill gave this morning upon the point will bear thoroughly sifting. I have not had an opportunity of going minutely into the matter; I only know that, taking the arrivals of the mails for the last 12 months from England to Bombay, I find the average to be $24\frac{1}{2}$ days; and I am strongly persuaded that that is not within the contract.

485. What is the contract rate?—Ten miles an hour, I believe. It is unjust to compare for a moment so difficult and dangerous a service as the Atlantic, with so peaceful a service as the Indian Sea; for nine months in the year it is a mill pond that the Peninsular and Oriental Company's vessels go over.

486. *Chairman.*] Then I suppose you represent it to be the general opinion of India, that Bombay ought to be what may be termed the chief postal port of India?—Unquestionably.

487. And that when the railways are completed, you will be able to transmit letters from Bombay to Calcutta and Madras, and the north of India, without the slightest difficulty?—Yes; by the last Overland Mail we received notice that the Calcutta portion of the Bombay mail had been forwarded by express from Bombay, right through to Calcutta, in 4 days 13 hours.

488. And that involved land carriage, did it

not, as contradistinguished from railway carriage, for the distance between Nagpore and Mirzapore?—From this side of Nagpore; from Suez to Bombay it is 13 days' voyage, and from Bombay to Calcutta, as arrangements now stand, it is four to five days; while it is 23 days from Suez to Calcutta.

489. Is not the result of the evidence which we have had given us to day that when the railways are completed, the distance from Bombay to Calcutta will be, in round numbers, 1,400 miles, and that that, at 20 miles an hour, which is the speed at which the railway carries its passengers between Bombay and Delhi would be 70 hours?—Yes; while it is 23 days' steam from Suez to Calcutta.

490. Is not it your opinion that the inference to be drawn from that is that with such a perfect system of communication in India as the railway system will provide, the greatest pains should be taken by the Government here to provide an efficient service between Suez and Bombay?—Unquestionably, there can be no mails carried any longer by sea on the other side of India, it is out of the question. If the matter had been to be determined by a merchant's office, it would have been done long since; but governments are slow to move.

Tuesday, 17th April 1866.

MEMBERS PRESENT:

Mr. Ayrton.
Sir Charles Bright.
Mr. Childers.
Mr. Crawford.
Mr. Laird.
Mr. Moffatt.

Sir Henry Rawlinson.
Admiral Seymour.
Mr. Stansfeld.
Mr. Turner.
Mr. Weguelin.

ROBERT WYGRAM CRAWFORD, Esq., IN THE CHAIR.

The Hon. ROBERT GRIMSTON, called in ; and Examined.

491. *Chairman.*] I BELIEVE that you are the chairman of the Electric and International Telegraph Company?—Yes; I have been so since 1859.

492. Your company is one of the companies to which messages for transmission to India are delivered in this country?—Yes.

493. Will you describe to the Committee the course which is taken by your company with those messages after you have received them?—We speak direct from London to Frankfort, and we send messages by the Frankfort route in preference to the Berlin route, where we also speak direct, because between Berlin and Vienna there are many more internal messages belonging to those countries than between Frankfort and Vienna. A message when it gets to Frankfort is transmitted from Frankfort to Vienna, and from Vienna to Belgrade. There are other routes through Moldavia and Wallachia, but the Belgrade route is the best route, and so to Constantinople (I cannot say positively whether the Turks have any transmissions between Belgrade and Constantinople), and so through by the Persian Gulf to India.

494. You communicate through two channels with the Continent, the one by Berlin and the other by Frankfort?—Both cables go to Holland; but the foreign Governments give us direct wires, that is to say, they are never cut off, to both those places, Berlin and Frankfort.

495. Exclusive wires?—Yes, exclusive wires; they are never cut off. They are joined to the wires of our cables, and are never cut off. But we always send the Indian messages *via* Frankfort for the reason which I have given.

496. Your message is then sent from London without interruption either through Frankfort or through Berlin?—Practically, we send them all to Frankfort.

497. From Frankfort; am I right in presuming that they come under the management of what is termed the Austro-Germanic Union?—Yes.

498. Which takes the message as far as Vienna, does it not?—The real fact is, that it gets into the Austro-Germanic Union as it passes over our wires directly it gets into Holland; but practically it is Frankfort.

499. From Vienna does it not pass by a separate cable?—

rate system, termed the Servian System, to Belgrade?—There is a route through Servia.

500. But it is separate from the Austro-Germanic Service?—Directly it gets to Belgrade it is out of the Austro-Germanic Union.

501. Does the Austro-Germanic Administration extend as far as Belgrade?—Yes, and there it ceases.

502. From Belgrade to Constantinople it is in the European part of the Turkish system?—Yes, and still continues in the Turkish dominions until it gets to Fao at the head of the Persian Gulf.

503. The first repetition then is at Frankfort, is it not?—Yes, at Frankfort; but there is no reason why that should be the first repetition. If the foreign Governments were so minded we might speak right through to Constantinople, as we do very frequently.

504. Without the necessity of repeating anywhere?—Yes, without the necessity of repeating anywhere.

505. That would require, would it not, a wire throughout exclusively appropriated to your own purposes?—Either that or when we do speak they join up the wires. At night when there is no work on any of their wires they then sometimes join them up, and then we can speak direct through to Constantinople; and if there were a wire devoted exclusively to that work, of course we could always do so.

506. Did you not make a proposition to the India Office some time ago, stating that you would lay down a separate cable to the Continent if the Government of this country could procure you the exclusive use of a separate wire all through the Continent?—We offered not to lay down a cable, but give up a wire for that purpose if the Government would use their influence to get the Austro-Germanic Union to devote a wire for carrying the messages on. That was the letter which I wrote to Sir Charles Wood in 1863, I think.

507. I see in these papers there is a letter bearing your signature; it does not say to whom it is addressed; I presume it is to Sir Charles Wood. The first letter is dated the 5th of November 1862, and the second the 30th May 1864?—Yes.

508. Lord Wodehouse writes in reply to your letter,

Hon.
R. Grimston.

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Hon.
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letter, "In reply I am directed to state that Sir Charles Wood is not as yet in a position to come to a decision on your suggestion, which, however, shall receive due attention when the arrangements in connection with the telegraph to India are more matured." Have you heard anything more of that since then?—No, practically I have never had an answer to that letter. I understand that it was placed in the hands of Colonel Stuart, who was then alive; but as nothing came of it, I asked Sir John Lawrence, who was then one of our directors, to speak to him, and he told me that Colonel Stewart's difficulty was, that it would be practically giving my company a monopoly. So I wrote to Colonel Stewart and said, "It is very ridiculous to say that you should not make one good route, on the ground that it would be so much better than the other routes, that it would become a monopoly; you should try to get 20 good routes."

509. I presume there would have been no objection on your part to any other company obtaining any similar concession?—No; the more routes there are, and the better routes there are, of course the better the service will be done.

510. The more facilities and the more business?—Yes, certainly.

511. In the case of your having to make reclamations upon the foreign Governments, to whom do you apply yourselves?—To the Dutch Government.

512. Are you in communication with the Dutch Government only?—Yes, only.

513. If the cause of complaint lies further on, do they pass the complaint on to the Austro-Germanic Union?—Yes.

514. Do you find a readiness to attend to complaints?—No; I think it is very unsatisfactory; and I think that the Governments do not attend to the complaints, practically, hardly at all; and there is very great delay before we get any answer at all.

515. Have you any means of putting your finger upon the place where the mistake was made, or have you any other method of arriving at the causes of complaints?—Only so far as our own lines go; of course we could tell if the mistake was made at Berlin, or if the mistake was made at Frankfort; but we could not tell anything beyond the point that they put it through to.

516. Can you furnish the Committee with the dates of the receipts at the various stations between this and India of the messages forwarded by you?—I have yesterday made out for the Committee the work of the last two months, and I know in particular cases the time of the shortest transmissions. The work has rather improved in speed during this month of April.

517. In the case of a complaint made to you in London by persons who have delivered messages to you for transmission, you communicate only with the Dutch Government?—We do not attend to the complaint of the receiver of a message at all. The contract is with the sender of a message, and, therefore, all that we do is merely a sort of act of courtesy. People are constantly coming (I am sorry to say it is too frequently the case) with messages that are unintelligible, and they ask us if we can give them any clue; we do our best; we have the slip examined, and the only satisfaction that we can give them is (and a very poor satisfaction it is) that it is as it was handed to us.

518. In the case of complaints with regard to messages which have been delivered to you for transmission, do you make your representation to the Dutch Government only?—To the Dutch Government only. We forward the complaint to the Dutch Government, and then they forward it to the next administration, and so it goes on.

519. That is to say you are not in communication yourselves with the Austro-Germanic Union or with the Turkish Administration?—We are with the Austro-Germanic Union, because Holland is one of the members of it, but not with the Turkish Administration.

520. Or with the Indo-European Administration?—No; nothing beyond Holland.

521. Then you have no means of identifying the causes of mistake or of recovering compensation beyond the Government to which you apply yourself?—Yes; we have. Holland applies them to the Austro-Germanic Union.

522. Then you in London do not make application?—Through Holland we do.

523. You receive, do you not, 5*l.* 1*s.* for every message of 20 words for India?—Yes, for India. That is nearly to the whole of India, to all the important places. There are just a few places where the charge is a little more.

524. Practically to Kurrachee, at all events, it is not more than that?—To Kurrachee, it is less than that, it is 4*l.* 10*s.* 6*d.*

525. Practically, to all India, then, it is 5*l.* 1*s.*?—Yes; to all important places.

526. Have you any objection to state to the Committee how much your company receives out of that money?—No; we get 3*s.* 6*d.*; the Austro-Germanic Union get 10*s.* 6*d.*, or as nearly as possible that; the Turkish get 1*l.* 8*s.*; and the Persian Gulf and the Indian lines get 2*l.* 19*s.*; which will make up the 5*l.* 1*s.*

527. Do you settle up with them individually?—With Holland entirely, in the same way that we make complaints to them. The balance is always, of course, very largely in their favour, and we settle with them every three months.

528. Where does the Turkish Government get its share from?—It is paid by the next telegraph administration, the Austro-Germanic Union.

529. Have you not occasionally sent messages by way of St. Petersburg to India?—Yes; I am sorry to say we have. It was a case with regard to which the Member for Liverpool made a complaint in the House of Commons. That was at the time when the Turkish lines were broken down, and we were officially informed from St. Petersburg that the line through Persia was open and working, and we sent those messages that way. From inquiries which we made, we believe that they went perfectly well through Russia, but when they got to Persia no further trace could be obtained of them; but the Russian Government are always pressing us now to send messages by that route, and they assert that it is the best way.

530. But, practically, your experience is quite the reverse?—We only had occasion to try it once, when the Turkish lines being broken down, and we being informed specially from St. Petersburg that the line was open, we sent those messages; and the result was, I suppose, that Jonadab, the son of Rechab, lit his pipe with them.

531. Did you select any particular messages for that experiment?—No; we sent whatever might have been given in to us.

532. Then you are aware, I dare say, of the fact,

fact, that those messages were very late in reaching their destination in India?—I fancy they did not reach it at all.

533. Have the Russian Government kept the money which you paid them for forwarding those messages which they did not deliver?—We paid the money, we had received it from the senders, and we paid it in the regular course of matters, and I suppose they paid the Persians.

534. Are you able to give the Committee any idea of the extent of the telegraphic business with India which passes through your Company?—Yes; in a rough way, I should put it at not more than 30 messages a day both ways; but then that would be including Sundays, because you cannot know when they come; messages come irregularly, at all sorts of times; sometimes you do not get a message at all, and then all of a sudden, as if they had been like a stream penned up somewhere, they burst upon you, and it is almost always at night, and it would seem as if they delayed them during the day for their internal messages, and then sent them when their wires were free. The greatest number that we have ever had in one day from India was 175, but then those, of course, were the accumulations of several days.

535. It is a matter of notoriety, that the public in this country were very much dissatisfied with the manner in which the Indian messages were carried to and fro until recently. Has not there been a considerable improvement within the last month or two?—Just lately, there has been an improvement, as you will see when you look at this paper, which I beg leave to hand in (*delivering in the same*); there has been a great improvement just lately, we have had a message from Calcutta to London in an hour and 50 minutes. That was a message from Sir John Lawrence to Sir Charles Wood, and, that being a Government message, they probably gave it precedence.

536. Mr. Childers.] Is that allowing for the difference of longitude?—I am taking English time in both places. The reality is that it would be seven hours and 50 minutes, but, taking English time, one hour and 50 minutes. A few days ago we had a message very quickly from Sir Jamsetjee Jeejeebhoy at Bombay to Messrs. Garrard in about four hours. That would be really 10 hours, but there is no reason if the lines were in English hands, and we could do what we liked, that it should be more than so many minutes.

537. Chairman.] Have you any suggestions to make to the Committee as to the method by which our telegraphic communications with India could be improved?—The best course would be to get as many alternative routes as possible. Although we have had bad luck with that Russian line, still the Russian line through Persia might be made available. Then, of course, the Turkish line through Constantinople ought to be the best line of all. Then if there was a cable laid from Ragusa to Bengazi, that, no doubt, would make a very good line, because you get a good service all through Austria, through the Austro-Germanic Union. Then there is a route through Alexandria, Malta, and Paris. Then, of course, it would be a very great advantage if you could have as few transmissions as possible, if you could get the foreign administrations to devote wires through their dominions for the purpose of the Indian messages, and if you could get English telegraphists. No doubt, if the service were well

performed, it would be very remunerative to those countries also to put up wires especially for the work, but, of course, so long as the work is so very badly done, the telegraph will not be so very much used.

538. Do you find in continental transmission of telegrams that messages sent in the English language are generally faithfully rendered?—Of course it is a great advantage that a person should know the language in which he is sending; but good telegraphists ought not to mind that; they have to send messages in languages that they do not know; they have to send messages in cypher, and a good telegraphist would not make a mistake whatever it was sent in.

539. Are you aware whether messages sent through to India from this country are read and recorded at any of the intermediate stations?—Of course they could be read and recorded at every transmission.

540. But do you know whether they are or are not?—No, I do not know that; I believe that in Paris, but that is mere hearsay, that they make four copies of all that they think of importance, and send them round to the different bureaux. I do not know that of my own knowledge, but I believe it to be the case.

541. You do not communicate with Paris, do you?—No.

542. Mr. Childers.] What system of telegraph is adopted over your line?—The Morse.

543. Do you know what system is adopted over the Austro-Germanic line?—The Morse also; we must use the same.

544. Is it the Morse system throughout to India?—Yes, over all the line.

545. Is that also the system throughout Russia and Persia?—Yes.

546. That is to say, does the Morse system prevail over all the lines between England and India, to which this Committee will have its attention drawn?—I cannot tell that.

547. Does it prevail in the Mediterranean?—Yes; our clerks have gone out to the Mediterranean.

548. By the Morse system, do you mean the old Morse system, the original system?—Yes.

549. Has the printing system been adopted at all?—It is a printing system.

550. But I mean ordinary printing, type printing?—No, you cannot adapt it to the type.

551. But is the type system practically used at all?—I think not.

552. It is the old system of dots and lines?—Yes, of dots and lines, and then the messages are copied out as delivered. When they are printed you have to paste the slips before delivery on to a form, so as to make it a continuous letter, because many people keep their telegraph messages, and it would not be convenient to keep them in the form of slips; and therefore, they are sent in that way, and pasted.

553. What I meant was this: does the message leave the instrument in London in the same shape as it reaches the instrument at Calcutta?—I imagine so; the person in London makes his marks to the man at Frankfort, and then the man at Frankfort makes his marks to Vienna, and so on.

554. Are the repetitions exact transmissions? Yes; or they ought to be.

555. Do you happen to know whether the same fault is found in France as is found here, as to the numerous mistakes that are made on the line

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line?—No, I cannot tell you much about France; we have no dealings with France.

556. But you do not happen to know whether the complaints which are so common in this country of errors in the transmission of messages are made in foreign countries?—I do not know whether they are or not; the errors are very numerous, indeed, but people who use the telegraph to India are people who telegraph a good deal, and they know how to make allowances; they are not a complaining class at all, although they have a very just cause of complaint. There is a very large proportion of messages which are really quite unintelligible, and our people do not know whether those messages are not cypher-messages; they are so unintelligible as that.

557. When a message reaches you, do you cut off the slip and send it, or do you transcribe it?—It is written out on a message form, and delivered so in a sealed envelope.

558. Are you aware that now on the Continent it is becoming more and more the custom merely to cut off a message, and deliver it to the receiver?—No, I am not aware of that.

559. Sir Charles Bright.] Is not it the fact that foreign Governments delay their through messages till their own messages have been all transmitted?—Yes.

560. And is not that a great source of the delay which exists?—Yes, no doubt.

561. Would not that be obviated if we could get a direct special wire to Constantinople, or by way of Italy to Malta, or by Ragusa, in connection with a line joining the Alexandrian line, if that were continued to India by way of the Red Sea?—Certainly; a wire either to Constantinople or to Ragusa would obviate that very great delay.

562. Have you ever received any return messages from India through Persia by way of Russia?—Yes, I think we have, but I will not be quite certain.

563. They would probably be received in better time, would they not, than the messages the other way, because the authorities in the Persian Gulf would know that the Persian line was at work?—Yes, of course they would; because, where the delay takes place is through Persia, and, therefore, if you can get through that in tolerable time, you may make pretty sure of having the rest of the route pretty well before you.

564. If you had a line of independent wire to India entirely in English hands, should you consider two hours to be an impossible average for messages between Calcutta and London?—I should think it would be a very disgraceful time to take; I think there is no reason whatever, if it was all in English hands, why a message should take much more than an hour.

565. Sir Henry Rawlinson.] That is independent of longitude?—Yes; and which is a very common thing; it would be delivered in London before the event took place.

566. Sir Charles Bright.] In fact, there is no reason, is there, on account of distance, why there should be, at all events, more than two circuits between India and England?—We know perfectly well that we can speak to Constantinople, and if the line were equally well beyond, I do not exactly know what the length of the Persian Gulf is, whether that might be an obstruction, but otherwise it might almost be done in two circuits.

567. What is the greatest length that you have spoken in Russia; I believe you have spoken to the extreme east of Russia?—Yes; we have spoken as far as Odessa; and we have spoken farther than that, we have spoken to some point farther east, to Omsk, in Siberia. We speak often from Moscow, but that is not so distant; but, of course, that was a mere trial message during the night.

568. Mr. Moffat.] You stated that much delay is caused by foreign Governments; do you find that all foreign Governments delay the telegraphic messages?—They all give precedence to their own messages.

569. It is not exclusively Persia that causes the delay, but the mischief goes through the entire telegraph route, right through every system to India?—They all give precedence to their own messages, but we know that the great delays and errors in Indian messages are through the Turkish dominions, and in India itself.

570. Do you find greater delay in the Turkish or in the Indian department of the telegraphic system?—I think that one is as bad as the other. Messages will take from 11 or 12 hours to as many days; and the delay, I think, is generally half and half between the Indian and the Turkish administrations.

571. To what cause do you attribute the extreme inaccuracy in messages which you have described to the Committee?—With regard to the errors in the messages, I should fancy that the great majority of them originated in India itself. I suppose it is from having natives to work the telegraphs.

572. As far as your information goes, it is from the want of a proper system of machinery for working them?—Yes, just so.

573. How would you propose to remedy that?—I should like to put Englishmen there.

574. That is the remedy which you would suggest as the only effective means of securing accuracy?—Yes, I should like to have English superintendence.

575. Sir Henry Rawlinson.] Can you tell me with regard to the most rapid message that you have received, whether it came through Persia or through Turkey?—Through Turkey, by the route I described, by Belgrade.

576. I mean the lower part of the route?—Yes, it came through the Persian Gulf, and through Bagdad and Constantinople, and so to Belgrade.

577. Are you aware that the Persia line in connection with the direct line through Turkey is entirely under English superintendence, but there are two lines through Persia?—Yes, but when I was speaking of the Persian line, I meant the Persian Russian line; but I should state that the Russians are always impressing upon us, that if we would but use that line it would be the speediest and best, but the only experience that we had of it was very unfortunate.

578. It is important, is it not, to bear in mind that the line through Persia is double, one being the Persian-Russian, and the other the Persian-Turkish line?—Yes.

579. The Persian-Turkish line is entirely under English superintendence, whereas the Russian-Persian line, from Teheran to the Russian frontier, is under native Persians?—Yes.

580. Mr. Ayrton.] Will you explain what you call the Persian-Turkish line?—The line which goes through Bagdad.

581. From

581. From Bagdad to the head of the Persian Gulf?—Yes.

582. When you wrote your letter to the Indian Government in 1862, it would seem that you did not get an answer until the 9th of June 1864; do you know whether that is correct, that the answer was delayed from the 5th of November 1862 to the 9th June 1864?—Yes, it would seem that it was. I had seen Sir Charles Wood, and pressed him for an answer several times, but I did not get it.

583. When you got it, it seems that it contained this important information: "That Sir Charles Wood is not as yet in a position to come to a decision in your suggestion"?—Yes.

584. Which does not seem to be an answer, but a postponement of the answer?—Just so.

585. Have you ever received an answer to that letter?—No; my reason for writing that letter was, that previously the Austrian Government had undertaken, when there was a question of laying the cable from Ragusa, to give a wire for Indian messages, and therefore I thought that it would be the simplest thing in the world for the Government to use it.

586. Do you think it a very difficult thing for a commercial company like yours to carry on your business, when the Government does not give you an answer to your letter for 3½ years?—All Governments are alike, and foreign Governments are worse than the English.

587. You appear to have got an answer from the Austrian Government, or to have got some intimation that you could have a through wire?—No, that was a Government affair; it was negotiated through the Government; it was a regular convention, and the Austrians undertook then to put a wire up, in fact, across Europe. It was a question about laying a cable, I think, from Ragusa, for the purpose of Indian messages.

588. Have you a copy of the rules of the Austro-Germanic Union for regulating the use of telegraphs?—Not with me, but I will furnish the Committee with a copy of them.

589. You have spoken of the errors and neglects in transmitting messages between England and India; have you taken any means to ascertain, by special inquiries, where the errors and delays exist, or are you giving the Committee general impressions?—I am giving the Committee my general impressions from the inquiries which I have made with respect to specific complaints. Of course we have had complaints, and then we have applied to the Governments, and tried to have them traced out.

590. Do you, in every case of complaint, forward it on for investigation?—Yes, we forward it for investigation.

591. Do you do that by telegraph, or by letter?—The actual message itself has to be sent.

592. By letter, of course?—Yes, by letter.

593. Then, in every case do you get an answer?—Ultimately we do, but the delay is very great, indeed.

594. Then the general statement which you have made is the conclusion from those letters which come before you?—Just so.

595. When messages are received which the receivers declare to be unintelligible, do not you send any telegraphic request to repeat the message?—We have done that, but we see and examine the slip, and then we ask, whether such

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and such a word in it is correct, and that is all we can do for them.

596. And on those occasions, what is the result of the references by telegraph to correct errors in the telegraphic message?—We find that we have got the message as it was handed to them.

597. Then that reference would only go back the first stage, not all through?—No, because foreign Governments would not allow us to send a message over their lines without our paying for it; therefore, for a message for which we got 3 s. 6 d., in order to find out a mistake we might have to pay 5 l. 1 s.

598. I mean, is there no arrangement or convention by which the telegraphic systems aid one another in the correction of errors for the benefit of the public?—No, the foreign Governments refuse to do anything of the kind; they will not be responsible for anything.

599. Do you think that it would be desirable that, as far as possible, the telegraph lines should be in the hands of private companies, who would be responsible?—Yes; but of course the foreign Governments would never admit that; they make too good a thing of it themselves.

600. But the British Government, in the communication to India, appear to charge 2 l. 19 s. out of 5 l. 1 s.?—£. 5 1 s. is the total cost of the message, and the Indian lines and the Persian Gulf line have 2 l. 19 s. of it.

601. They do not set an example to the foreign Governments of cheapening telegraphic communications?—No. The Governments have a tendency, on the Continent, I believe, to carry as cheap as possible; the communications being in the hands of the Government, and they do it not to make any profit by it, but for the sake of trade.

602. Do you consider, on the whole, that the German Union line is very accurately, and very well worked?—Yes, very well worked.

603. And that you have no cause of complaint?—No cause of complaint whatever.

604. Do you consider that their rates are reasonable for the service performed?—Yes.

605. You do not consider then that the Austro-Germanic Union do make any unreasonable profit on their telegraphy?—I do not suppose they make any profit at all; I should think they lost money.

606. I understood you to say that they were carrying it on for an unreasonable profit; that observation does not apply to the Austro-Germanic Union?—No.

607. With regard to the Turkish line, do you think that their charge is unreasonable?—I think that it is rather high.

608. And it is the Turks who seek to make this profit, you think, beyond what would be a fair remuneration for the service rendered?—I think that the rates in Turkey are too high, but I do not exactly know the mileage.

609. Sir *Henry Rawlinson*.] The mileage would be about 2,000 miles?—Then I do not know that it is an unreasonable charge.

610. Mr. *Ayrton*.] Then you think that that is not an unreasonable rate on their part for the service performed?—I still think it is too much.

611. You do not know, as a matter of fact, how much money is paid into the Imperial Treasury at Constantinople as the net profit of this telegraphic system?—No, I do not know that.

612. Did you ascertain accurately where the break down occurred in the attempt to communicate through Russia?—I believe that the

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messages went perfectly well all through the Russian dominions, and that the breakdown was somewhere in Persia.

613. Do you suppose that it was on the frontier of Persia or in Persia itself?—In Persia itself; that is what we were told.

614. *Chairman.*] Is not the inter-communication between the different Continental States regulated by a general convention?—There is the Austro-Germanic Union, and then there is the French system. The Austro-Germanic Union consists of Austria, Prussia, Hanover, Holland, and the other German States, and the French system consists of France, Switzerland, Belgium, Italy, and Spain.

615. What was the Convention of Brussels of the 30th of June 1858?—That would be with respect to the French.

616. I see in a Convention between this Government and the Ottoman Government this expression: "The Convention of Brussels of 30th of June 1858 in all that relates to the details of the Telegraphic Service shall be mutually observed by the two contracting Governments in so far as it is not opposed to the terms of the present Convention." Is the Convention of Brussels of the 30th of June 1858 a convention which has been published?—I do not think that it touches the Austro-Germanic Union. I think it is with regard to the French; but I am not acquainted with it.

617. With regard to the times which are stated

in the working returns which you put in just now, are the times of departure and the times of arrival in London the actual times?—They are all London time. I have not examined them, but I imagine that it is so.

618. Take the first message, which is this: "Left Bombay, 24th February 4.26 p.m., arrived in London 1st March 5.17 a.m.; time in transmission four days 12 hours and 51 seconds"; is that the time actually occupied in the transmission of the message with an allowance made for the difference of longitude?—No, there is no allowance made.

619. *Sir Henry Rawlinson.*] I perceive that in February last it was reported from Constantinople that the communication by telegraph, both to India and to London, has been surprisingly regular and proper; the messages scarcely occupying more than one day; will you state to the Committee, whether that improved state of communication has been kept up to the present time or whether it has relapsed into its former bad state?—It has been working better the last month than it has worked at all, as you will see by these returns which I have handed in.

620. What do you consider the average time now if you can strike the average of a month for instance?—I should think that it would be very difficult indeed to do so.

621. I see that the average is not much more than one day?—Probably that is so.

Sir MACDONALD STEPHENSON, called in; and Examined.

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622. I BELIEVE you are the Chairman of the Telegraph to India Company?—I am.

623. Was that a company which was formed under that name for the purpose of establishing telegraphic communication between this country and India, by way of Egypt and the Red Sea?—Yes.

624. It is the company which laid down the line, and to which the guarantee of 4½ per cent. of this Government applied, is it not?—It is the successor of that company.

625. What is the present position of the company over which you preside?—The object of the company was to restore the defective portions of the original Red Sea line, which intention was given up on ascertaining by personal examination by Mr. Latimer Clark, who was sent out by the company, that the defects extended almost entirely over the whole line; I may state that the company retain the firmans granted by the Ottoman and Egyptian Governments. The map which I now hand in (*delivering the same*) will show the general direction of the line as it was originally laid. The company contemplate the re-establishment of the Red Sea line as an indispensable alternative to the Persian Gulf line.

626. What is the present position of your company?—So far as I am able to describe it, it has an intention to re-establish the line, the land line being leased to Messrs. Glass and Elliott, who are working the Malta and Alexandria line till an opportunity is afforded for carrying out the comprehensive scheme which was originally intended.

627. What is the length of your line; between what two points does it lie?—3,200 miles between Alexandria, by Suez and Aden, Muskat, and Kurrachee.

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628. That was the line that was originally intended; but I mean the line that you have now in hand, and are actually working at this moment?—The only portion of the line now working is the land line between Alexandria, Cairo, and Suez.

629. You get from your local messages a very good return, do you not?—A very large return is received; but the company only receive enough to pay a 5 per cent. dividend under their arrangements with the lessees.

630. Do you contemplate carrying this line of yours down the Red Sea to India?—We are arranging for a combination of all interests, so as to get an independent line from England to India by way of the Red Sea; and for working the railway telegraphs in India in conjunction with it, for eventually completing direct communication between England and Alexandria *via* Gibraltar and Malta, for continuing the lines to China and Australia; and for making arrangements with the Government of India for bringing the Persian Gulf line as well as the Indian land lines all under one responsible and efficient administration.

631. To what do you attribute the failure of the Red Sea line, which was originally laid down?—The causes of failure of the line by the Red Sea to India were too light and weak a cable; too tight laying, insufficient surveys of the bed of the sea where the cable was laid, the want of protection of the outer wires from the action of the water, and the want of any experience in similar works for guidance in laying the Red Sea line.

632. On what grounds do you expect to be more successful in the attempt which you are projecting?—The grounds for expecting success in

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in renewed operations are the greater perfection of the modern cable as to insulation and conducting powers; as to strength, weight, and protection of the outer wires, the more careful laying, improved machinery for the purpose, accurate surveys of the sea bed, selection and adoption of the line of preferable depth and bottom, and the possession of past varied and conclusive experience; and to secure efficiency in working by the employment of an experienced and adequately paid staff.

633. Do you propose to carry that line down the Red Sea from Suez?—The company are undecided as to whether to use the Egyptian lines, as has been suggested, to Massowah, or to continue the deep sea line from Suez; but the recommendation that they received in Egypt, from very high authorities there, was, in order to render it independent of any land lines, if possible, to lay the line independently from Suez.

634. Has any fresh examination of the bottom of the Red Sea been made since the time of the failure of the company which you succeeded?—None.

635. But was not the failure of that line attributable in a great degree to circumstances connected with the bottom of the Red Sea?—I speak with diffidence upon subjects upon which Sir Charles Bright, Mr. Clark and other professional gentlemen can speak so much more positively and authoritatively; but I am quite satisfied that, in order to lay a telegraph line, the survey of the bed of the sea should be almost as accurate as the survey of a land line of railway. The surveys of the Red Sea Company were originally executed by a very experienced man, Captain Pullen, who specially devoted many months to that investigation. But it was not known then how perfect the survey would have to be made, and how carefully it would have to be followed in making the line. The line occasionally fell upon rocks and hung in festoons, and was broken by its own weight, all which might have been avoided by a more careful survey.

636. Are the gentlemen with whom you are in communication now prepared to proceed to the laying down of a new line in the Red Sea, provided, of course, that you have the funds and other necessities of that kind forthcoming?—They are.

637. That is to say, upon the information which you now possess with regard to the configuration of the Red Sea?—Yes.

638. You stated just now the combination of various interests which was proposed for the purpose of carrying out this very considerable scheme; I suppose that you have very little doubt that that would meet the object which you have in view?—I am satisfied that nothing short of a complete comprehensive measure will satisfy the just expectations of the public, both of India and of this country; one which shall secure uniform regularity, which is of more importance than cost, and the want of which now renders the telegraph worse than valueless. The public reasonably object to subscribe to fragmentary schemes, imperfect in themselves, dependent upon the working of connecting lines, constantly under repair, and, under the most favourable circumstances, utterly unreliable as regards their chief value, time. I have no doubt, that a well considered undertaking, which shall combine all the telegraph interests, and shall afford reasonable evidence to the public of its means and intention

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to accomplish the great object of establishing perfect telegraphic communication between Great Britain, India, China, and Australia, will be cordially supported both at home and abroad, and would be successfully carried out, provided the complete scheme be clearly defined, and its execution judiciously regulated according to the relative importance of the several sections or divisions of the work, and to the capital called up from time to time.

639. It is a principal feature, is it not, in the scheme which you propose, that the whole of the operations of this company shall be conducted under one responsibility, and by one agency?—By one administration.

640. So that in the case of complaint, the company would be the only person to be referred to, and in the case of responsibility, they would be the only person to make good any claim under their responsibility?—Yes; there should be one undivided responsibility.

641. You have no doubt, probably, that with regular and accurate working, the public will use the telegraph very much more than they do at present?—So soon as regularity in despatch and arrival can be secured, the cost not being excessive, the public will undoubtedly make use of the telegraph to an extent far exceeding anything that has yet been known, except in the United States; and I have no doubt that within a very few years, when the contemplated lines shall have been completed, and the line is laid direct from England to Alexandria, one page at least of the "Times" and principal daily papers will be exclusively devoted to the telegraphic tidings of the preceding day from all parts of India, China, and Australia, and a corresponding despatch shewn in the papers of India, the colonies, and China, in regard to European news; I am quite satisfied of that.

642. You speak now with regard to public intelligence?—Certainly. With a proper organization, and the proper means being adopted, which have never yet been adopted, there is nothing to prevent the news of yesterday in China, India, and Australia, being in to-day's "Times."

643. Is not another principal feature in your scheme the entire avoidance of what we may call continental complications?—Yes, that is one advantage that would be derived from an alternative line; and that would be one inducement to continental nations to improve their lines when they find that people are not obliged to resort to them.

644. Are you sufficiently prepared with the details of this undertaking to state those details to the Committee?—By the 30th of this month, if the Committee would be prepared to receive them, I shall be able to lay very complete statements, with all the details, before the Committee.

645. Does your programme involve any application to the Government of this country for pecuniary assistance in the form of subvention or otherwise?—The subject has not yet been decided; but I think that the Government, when the case comes before them, will be better prepared to give some conditional subsidy, than to be at the mercy of a powerful company who may dictate their own terms to them.

646. You have at the present time no interest in applying for public money in any form?—No.

647. Except for service rendered in the transmission of messages?—Precisely so.

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648. *Chairman.*]

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648. *Chairman.*] You have been for many years largely engaged in telegraph operations, as a civil engineer, have you not?—Yes.

649. Were you employed professionally in connection with the Indo-European line?—Jointly with Sir Charles Bright, I was engineer to the submarine portion of it in the Persian Gulf, and to Kurrachee, in India.

650. What is popularly known as the Indo-European line between Fao, at the head of the Persian Gulf, and Kurrachee?—Yes, the submarine portion of the line.

651. Did you superintend the laying of it down?—I did not superintend the laying of it down. Sir Charles Bright was out there, and superintended the operation of laying it down, but our firm had the management of the cable in this country, directing its manufacture.

652. Are you acquainted with the present condition of the line by report?—Yes; it is in very excellent condition. I receive frequent reports from the officers that its insulation is better than when it was laid down (which is a very common circumstance with such lines on account of the age and the temperature), and that it is in perfect working order.

653. Had you anything to do with the selection of the operators upon it?—A great many of them I selected myself. They were all selected under our knowledge and recommendation.

654. And have they proved themselves worthy of your recommendation?—I think they have quite. The staff is very efficient, and I believe that the duties are in every way performed in a most satisfactory manner.

655. Are you in communication with the persons employed upon the telegraph?—Privately, not officially, I am in communication with some of them.

656. But still from the interest which you take in it as the manufacturer of the line, you keep yourself in constant communication with the officers of the line so as to know what the practical result of your attention to the cable is now?—Precisely.

657. Do you happen to know what time was taken in the transmission of messages?—I have seen a report in which it is stated that three-quarters of an hour was the average time for transmission during one month, which, I think, was about three months back; and I dare say that continues to be the average at the present time between Kurrachee and Fao. There are repeating stations at Gwadel, Mussedom, and Bushire.

658. In the case of all messages?—Usually they are repeated at those places.

659. Could not you pass a message right through?—We could pass a message right through very easily, but we should get a somewhat slower speed by doing so, and at present it is found preferable to transmit them to each station. But if the business increased it would not be difficult at all to use a mechanical relay for transmitting them mechanically directly through, which would give us an increased speed.

660. Then, so far as the telegraphic service between this country and India has been unsatisfactory, have you reason to know that none of that want of satisfaction is due to the Indo-European part of the system?—I may say certainly

not. During 14 days it was out of repair. But that would not of itself give rise to dissatisfaction.

661. Have you given your attention at all to that particular service between this country and India as to other parts of it than the part which you have just been speaking of?—I have always collected all the information I could upon the subject, and I have paid much attention to it.

662. Were you a party to the propositions which were made in 1863 to the Indian Government for the establishment of a different system of telegraphic communication in India?—Yes; I was rather an active party in assisting the matter, and in getting it together. It was arranged that all the telegraphs of the railway companies in India should be combined into one association, so as to form one large telegraph company, and that new lines should be erected, and that directors from each of the railway companies should be selected, in fact, they were actually selected, and appointed provisionally. That was in conjunction with the Chairman of the Electric and International Company in England, Mr. Grimston; and also the deputy chairman, and some other gentlemen connected with India and with telegraphs. It was proposed that they should be associated into one company, taking the wires on all the railway lines in India under their charge; they were, in fact, to take the telegraph lines themselves, to maintain them for the railway company, to establish new communicating wires, and to form a company worked by European operators of the very best kind. That proposition was drawn out in full, was agreed to by all the railway companies, with the exception, I believe, of one, and was, I think, submitted to the Indian Government. I believe that the reply received from them was, that the authorities in India did not assent to its adoption.

663. And nothing more has been done upon the matter since?—I believe that nothing more has been done upon the matter since; the company is still partially in existence, but not doing anything.

664. You stated, did you not, that all the railway companies but one were parties to your proposition?—Yes, I believe all but one; I can give you the names of the companies; they were the East India Railway Company, the Great Indian Peninsula Railway Company, the Madras Railway Company, the Great Southern of India Railway Company, the Eastern Bengal Railway Company, and the Bombay, Baroda, and Central India Railway Company; the Scinde Railway Company, we did not apply to, whether from neglect or design I do not know; it was our intention afterwards to have included them in the same arrangement.

665. In point of fact, the proposal which you made was this, that you and the gentlemen whom you were then connected with, forming yourselves into a company, should work the telegraphic wires of each railway, under agreement with the railway companies?—That was so; they receiving a portion of the receipts and other payments.

666. The whole of which was reduced into writing?—Yes; the whole was reduced into writing and submitted in one complete uniform form to the Indian Government for their sanction.

667. Have you made yourself acquainted with the

the general character of the Telegraph Service in India as carried on by the Government?—Only by constant hearsay, having been connected for many years with telegraphy in this country. I have had the sending out of the majority of the employes who are now operating in India and superintending the lines, and I am still in communication with many of them, and I hear from them generally the state of the lines in India.

668. They are lines, I believe, which traverse the country in various directions without reference to the course taken by the railways?—Entirely so.

669. Does not it strike you that a line of railway is the natural course for a telegraphic line of communication to take?—I think unquestionably it is the most easy line to maintain. Any defect in it is, of course, reached with much greater speed than it could be across the open country. Also it is overlooked very much more easily and more constantly by the constant passage of guards and others, who give intimation of it if they perceive any defect. So that I think the railway forms the natural route for the establishment of a telegraph, much better than the open country.

670. It is accessible at all times to inspection by every passing train, and it is equally accessible for repair?—Yes; and more so.

671. Being in that respect very differently circumstanced from the telegraphic wire which goes across the country without reference whatever to the communications?—Undoubtedly.

672. Do you think that if that arrangement had been carried out the service which you contemplated introducing into India would have been more useful as a distributor of the messages from England to Kurrachee, than the Government service has been?—I feel confident that, as we should have performed the service with the very best English superintendents and clerks, and performed it in the very best English style, it would have obviated all the complaints of the working of the telegraph in India, so far as regarded the main Calcutta lines and all the main trunk lines of the country.

673. Did you intend establishing other lines besides those which are upon the railways now?—It was part of our proposition at one time to take over the entire system from the Government into our own hands. But we had reason to apprehend that there would be difficulties in arranging it, and so we contented ourselves in the first place with arranging only for the main trunk railways.

674. You did not make any specific proposition to the Government to take over the lines?—We did not make any proposition to the Government.

675. With regard to the main line communication by telegraph between this country and India; are you of opinion that the public interests would be served by the substitution of more than one, or in fact of many lines for the single one which now exists by the Persian Gulf?—Certainly. I think that all the lines that could be formed from here to India should be encouraged. I believe that there would be plenty of traffic for several lines. I would specially point out, as being the most obvious and the most important in the first instance, the Red Sea route, which was attempted, and in fact I think I may say executed, on a former occasion, but failed in working immediately after it was laid.

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676. Had you any connection with the old Red Sea telegraph line?—I had none at the time it was first laid, but I was afterwards desired to go out on behalf of the Telegraph to India Company, and report on the cause of the failure; and I went out as far as India, being provided with a steamer and proper appliances with the view of endeavouring to restore the whole communication if it were possible, or any part if it were possible, and reporting on the cause of the failure and the best steps to be taken for reinstating the line in future.

677. To what do you attribute the breakdown of the Red Sea Line?—The chief and most immediate cause of the failure of the Red Sea Line was the rusting of the iron wire. It was a small cable of unprotected iron wires, and the ocean there is generally rather salt, and iron seems to decay even more rapidly than usual. Wherever I lifted the line, which was at a very great many points between Suez and India, I found the iron wires invariably greatly decayed and rusted away; so much so, that almost at every 100 yards we found the gutta percha perfectly unprotected by anything, and the portions of iron wire which had not disappeared terminating in sharp points like needles, the line depending for its strength solely on the gutta percha. Another cause which tended greatly to aggravate the evil was, that the line had been laid excessively taut; the breaks used in putting it down has evidently been screwed rather hard, and the line was stretched across from point to point wherever there were rocks; so much so that at some parts I found not more than 25 per cent. of the cable resting on the ground, the remainder hanging in festoons; this became covered with coral and shell and sea-weeds, and these became so heavy, that their weight broke down the gutta percha which was the only remaining strength, and the line dropped spontaneously into separate lengths; the longest length I found perfect between Suez and India was 50 miles.

678. In what year was that cable constructed?—I think in 1859 and 1860; the year that I went out was 1862.

679. I suppose that the cable which you constructed for the Persian Gulf line may be considered to represent the improvement in the practical construction of telegraph wires between the time when the Red Sea wire was made, and when the Persian Gulf wire was made?—I think it does fairly so. I think it would be considered now-a-days by most engineers to be an excellent cable.

680. Mr. Ayrton.] The Commission on the construction of Marine Telegraphs, appointed by the Government, carried on its investigations, did they not, intermediately between the laying down of the cable in the Red Sea and the time when you laid down the Persian Gulf Cable?—Yes, they did so; that Commission sat in 1859.

681. Chairman.] Should you recommend for the purposes of communication in the Red Sea a cable of a similar character to that in the Persian Gulf?—I should do so certainly. I am not aware of any great modification that could be introduced with advantage at present.

682. Have you really sufficiently advanced in science since the original Red Sea line was made to be tolerably confident in your own mind that a cable made in the present day would, for a long period of time, answer the purposes of communication

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munication by way of the Red Sea?—Yes, I feel in my own mind perfectly certain that a cable laid down now in the Red Sea, instead of failing as it did, would form a very permanent and efficient communication. I examined the route very carefully through the whole distance wherever I had reason to suspect difficulties, looking especially to the question of coral in the Red Sea and the rocks along the southern coast of Arabia; and I am of opinion that a cable could easily be laid in soundings where it could be repaired and recovered in case of damage, with the exception, perhaps, of a small portion near Muscat, a very small portion of line, and that could be avoided by a longer détour.

683. You think that you are sufficiently acquainted with the bottom of the Red Sea to enable you to speak with confidence upon that point?—I think that further surveys would be desirable before actually laying down the cable; but I am certain from what I saw that it forms a very good and efficient route for laying down a submarine cable, and that one may be laid and maintained there with perfect ease and certainty.

684. When you say from what you saw, you mean from the acquaintance that you had and the examination that was made of the bottom of the Red Sea?—From the charts of soundings that I took with me, comparing them from place to place with my own observations and soundings and examination of the route. I had a steamer specially provided for that object. I had every facility for examining the coast.

685. Your special purpose, then, was to see what the bottom was?—As soon as I found that I could not restore the old cable, I devoted myself entirely to examining the route with a view to laying down a new one.

686. Did you examine the southern coast of Arabia?—The whole length of it.

687. Is it a favourable coast for laying a line?—Decidedly so; very much more so than I should have expected. There are rocky portions along it, but by a careful survey the line might be made quite as permanent as is requisite.

688. Are there stations on the coast where the cable could be brought up for the purpose of repetition?—Yes. The route I should recommend starting from Egypt would be to cross the desert to some point; perhaps Massowah might be a favourable point. I myself went up the Nile to examine that part of the route, and crossed the Desert to a place near Kosseir, which appeared a most favourable point; it is a little spur a little above the middle of the Red Sea which points towards the southward; that point is a singularly favourable point to start from. I went as far as that, and I obtained the permission of the Pasha of Egypt to make use of his poles up the Nile and a firman from him to the Arabs who are nominally under his control; and I made arrangements with the Arabs for a subsidiary payment of such a character that I am convinced that if a line were carried over that country there would be no difficulty of any kind whatever.

689. Has the Pasha a line up the Valley of the Nile now?—He had a considerable way up the Nile, and he is now carrying the line south the entire length of the Valley of the Nile, and going across to a point on the Red Sea, Souakin, 2-3 down the Red Sea.

690. Souakin is in latitude 19°?—Yes.

691. And Suez is about latitude 32°?—Yes.

692. So that by using the Valley of the Nile you would save about 13 degrees of latitude of submarine cable?—Yes.

693. Is not that a great consideration?—Yes, I think it is a matter of the greatest consideration in point of price; and I do not think it would be any detriment in point of efficiency.

694. Do you suppose that there would be any objection on the part of the Pasha to allow you the control of that wire through the Valley of the Nile?—The late Pasha gave me every assistance, and provided me with steamboats, &c., and I think the present Pasha would do the same; I dare say expecting some payment in return, some portion of the receipts; I have reason to think, from what I have heard, that he would do so.

695. After passing up Cape Ras-el-Had, the north-east point of the southern coast of Arabia, in which direction would you take your proposed line?—I should go, I think, to Muscat, and then cross towards Churbar, on the Mekran Coast; the water is very deep there. I remember I picked up the cable in 600 fathoms there, but I believe the water goes to a very much greater depth. As far as rocks were concerned, I found that the bottom was bad and rocky, but I would avoid that portion and keep along the coast more round towards the Persian Gulf, and then cross in shallower water.

696. Would not it be practicable to take your line from Cape Ras-el-Had through the town of Muscat, and along the coast up to Mussedon?—I think not advisable. The Arabs are very troublesome and dangerous there, and at the present moment they are in a state of insurrection, and are not good people to deal with. The late Imaum of Muscat was extremely friendly, and offered, and I believe he would have given, every possible assistance himself, but he had not full control over that portion of his dominions.

697. What would you propose to do after getting to Mussedon; would you propose to join on to the other line, or to form a separate one of your own?—That is more a political than an electrical question. The present line is very efficient and very good, and at present I dare say could do all the business of that route; but in a very short time the business will increase, so that an additional line will become indispensable.

698. Has the bottom of the Arabian Sea been sounded between Ras-el-Had and Bombay?—I believe not.

699. Is it too long a distance to work by one wire?—It is not at all too long a distance to work by one wire; but at present we have had so little experience in the permanent maintenance of deep sea lines, that it would be considered, I think, rather a gratuitous risk to go direct across there, although personally I have no doubt that in a few years it will be very much the custom to cross such depths as this, and that the telegraph will be eventually taken from Muscat direct to Bombay; but our present experience would scarcely warrant an engineer in taking that course.

700. Have you described to the Committee the whole of your scheme for connecting the European system, which terminates at Cairo or Suez, with India?—Yes. I may say that I would propose stations at Massowah, at Aden, and at Macullah, (where I landed, and made arrangements for making a station, and received a very friendly reception from the Arabs), and at the Kooria

Kooria Moorla Islands. I do not think that I found Ras-el-Had a favourable part of the country. I would then proceed to Muscat, and thence to Kurrachee, crossing over to the Mekran coast, and so along the coast to Kurrachee.

701. Have you any knowledge of the line which has lately been opened between Alexandria and Diarbekir?—I have not much knowledge of it, only by hearsay.

702. You are aware that that line has been opened?—I am aware that a line has been finished, partly by the Turkish Government.

703. Will not one of the great advantages of the line which you propose be this: that in the event of difficulties in European Turkey, or in Germany, messages might be sent by way of France and Italy to Alexandria, and thence over the line from Alexandria to Diarbekir, and so by the Indo-European line?—Yes, certainly; even before the other line was completed, or in conjunction with it.

704. But after the other line was completed it would form an alternative line, useful for the purpose of security, and useful also as relieving the other line of a portion of what may prove to be too much work for it?—Yes, it would prove a perfect alternative line.

705. Sir Charles Bright.] The operations which you have spoken of for re-establishing the Red Sea line were abandoned in the autumn of 1862, were they not, in consequence of the Government of India deciding on carrying on the line by way of the Persian Gulf?—Yes. On my return to this country I made a report to the Telegraph of India Company, in which I informed them of the state of their line, and the cause of their failure, and strongly recommended them to proceed at once to form a company to lay a cable by the Persian Gulf, and the River Tigris or Euphrates to Constantinople: they accordingly formed a company with that object, and made an application to the Government for permission to do so, and then we learned that the Government had already taken in hand the Persian Gulf scheme.

706. Mr. Ayrton.] Did you apply to the Government in 1863, to carry out this scheme of taking over the Indian telegraphs; do you recollect?—An application was made by the railway companies to Government, asking them to assent to our proposition for taking over the telegraphs.

707. Do you recollect when you received an answer, and whether it was in September 1864?—I do not remember the time; it was a long time before we got an answer.

708. Would not it be very prejudicial to the progress of any private undertaking to be kept 15 months without an answer from the Government?—If that was the date, I think a delay of 15 months is of course very prejudicial to the progress of any undertaking.

709. Have you any knowledge of the arrangements that are now in force between the railway companies in this country and the telegraph companies, for the use of the telegraph lines along the railways?—Yes, I am very familiar with them; I have negotiated the majority of them, I think.

710. Will you be kind enough to inform the Committee what is the nature of the arrangements between the different telegraphic companies and the railway companies?—They are extremely variable, depending very much on the date at which they were formed. In the earliest

days, before my connection with telegraphs, it was customary for the railway companies to pay a very large price for their telegraphs, and to give a great many privileges. About the year 1861, when I first had occasion to negotiate agreements with them, it was usual for the railway companies to grant the privileges of free passes over their line, and to pay the cost of the telegraph, in consideration of the use of the electric companies' patents, and of their staff for working them. In the later arrangements, it became usual for the electric telegraph companies generally, to put up the lines at their own cost, and to receive from the railway companies a payment usually of about 5*l.* per mile for the same privileges and rules, the electric company in every case taking the whole of the commercial receipts.

711. But in any later case, did the telegraphic company undertake the whole management of the telegraph on the railway line, both for the purposes of the railway company as well as for the public?—It was usual for the telegraph company then to take the whole management of the telegraph lines into their own hands, and to supply the clerks necessary for it. Afterwards it was found necessary to establish a great many signalling clerks, and also signalling wires on different railways; and now the custom is pretty general for the railway companies still working under the original agreements with the telegraph company, to have an independent system of their own, under their own officers, for working the signalling apparatus, and to put up wires on the telegraph companies' poles, or sometimes on their own poles, for the signalling purposes of the trains.

712. That is merely for the purpose of signals where telegraphic signals are used to transmit an intimation of the approach of trains and the passage of trains?—That is merely as signals for trains only, and not for messages between station-master and station-master connected with the trains.

713. Then the messages for the conduct of the railway business would still be managed and superintended and transmitted by the telegraphic company?—Yes, by their clerks. That is a general outline of the existing agreement.

714. For which they receive a payment from the railway company in gross?—They only receive a payment of about 5*l.* for that, and sometimes 3*l.*, and they receive the privilege of free passes and an exclusive right to telegraphic communication over the line.

715. You mean free passes for the officers of the telegraph company going backwards and forwards on the business of the company?—Precisely.

716. Do you know whether that system has worked well, or whether there have been a good many complaints on the part of railway companies of the neglect of their business messages?—There have been singularly few complaints on the part of railway companies; it is a very rare thing for them to complain; it has worked extremely well; but they are feeling rather jealous now at the prosperity of the telegraph companies, and they are very much inclined, and in some cases they have actually carried out the idea of working the telegraphs on their own account.

717. That is to say, having no telegraph companies working their line at all, but taking the whole thing into their own hands as part of their

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own undertaking?—Yes; erecting their own telegraphs, and working in conjunction with the telegraph companies.

718. Do you think it desirable, not only for them to transmit their own messages for the purposes of the railway, but also to telegraph for the public for profit?—Yes; having working arrangements with the telegraph companies, each receiving a portion of the profits; that system is now beginning to obtain.

719. Do you think that there is great economy of management in the system which you have described, of the telegraph company undertaking the whole administration, and receiving an allowance from the railway company as compared with any system of joint administration, or of joint telegraph between the railway company and the telegraph company?—Yes; I think it has worked well, and perhaps it is the most economical method; but I think the time is coming when it will be found better for each party to attend to their own business; for the telegraph company to hold themselves entirely for the interest of the public, and for the railway company to attend to their own business.

720. Do you think there will be so much business for the railway for its own business, and for the telegraph company for the public, as to pay for two administrations and two sets of officers?—I think that it is coming to that, and that the amount of business is increasing rapidly on both sides.

721. But where the business is not great, is there not great economy in having only one set of telegraph clerks at each station?—There is very great economy and advantage in that system on the small lines, because by it they are enabled to maintain telegraphs and telegraph offices and operators when neither party alone could well afford to do so.

722. It would entail a loss if either party alone undertook it?—Yes.

723. But by joint action it could be carried on perfectly well?—Yes; but on trunk lines that is not the case; there there is business enough for both independently.

724. Under the system which you have described, do the officers of the railway company give any assistance, or are they bound to give any assistance, in reporting the condition of the wires along the line?—They are bound in general terms in every case to give every assistance, but it is only a general duty, and practically the duty only extends to their guards giving information when they perceive the wires visibly out of order.

725. Do you know whether that works pretty well; do they generally give information?—I think that telegraph companies rely chiefly on their own officers and on their own means of information, which are very perfect, because they are telegraphic, and they receive a telegraphic announcement of any breakdown, and probably hear of such a case long before a guard finds it out himself; therefore the guard's part of the duty is non-important now, and is not much attended to.

726. You mean that the communication between station and station is so perfect that they could detect any accident, such as the wire falling down or otherwise getting out of perfect insulation?—Very perfect. They could detect it much quicker than by any other means that you could imagine; but when the poles begin to get on one side or to decay, or the wires rub against trees, and accidents of that kind happen which do not interrupt

communication but endangers it, then the reports of the guard are sometimes of value.

727. Can you furnish the Committee with the forms of the contracts which have been entered into between the different telegraph companies and the different railway companies, showing the differences which exist in the nature of the arrangements?—I am still an officer of the International Electric Company, and therefore I have access to its forms; I could not of course, without their permission, make them public; but I shall be very happy to endeavour to obtain that information and to hand it to the Chairman.

728. From your long experience of those matters, and having regard to the amount of business conducted on the Indian Railway, and the amount of telegraphy carried on from India, what, on the whole, do you think would be the best system to adopt for the purpose of concentrating all telegraphic communication on the lines of railway in that country?—I think, looking to our experience of Indian officials in telegraphic matters and telegraphic business, that for the present and some years to come the system originally adopted in England would be the most perfect, that of handing over to experts connected with telegraphy in this country the entire management of the telegraph, both for commercial and railway purposes, until they grow in course of time sufficiently important for each of them to stand alone.

729. I presume from the traffic on the Indian lines, taking it at 54½ per mile per week, and from what you know of Indian telegraphy, you can form an opinion as to whether the time is likely to arrive for departing from what I may call the primitive system of arrangement; for many years to come?—I think not for a great many years to come. I think the amount of business in India, except perhaps on the main trunk line, would be best worked on the system which I have indicated, for a long time to come.

730. Are you aware that the salaries paid for European superintendence in India are much higher than those that are paid for similar superintendence in this country?—I am.

731. Probably they are twice as much in general?—Yes.

732. Having regard to that higher rate of payment, do you think that the economy would be peculiarly great in the concentration of the management and administration of the telegraph system in India in one set of lines on the railway?—I think it would be so on the main trunk lines; but I do not think that on the out-branches the telegraph could be made self-sustaining at the present time.

733. I am asking you would not it be a peculiar economy or inducement to concentration of effort on the railway that you would economise the superintendence by that system as compared with several systems working separately?—Am I to understand the Honourable Member's question as applying to the Government telegraphs?

734. To the main lines of communication?—I have thought that the most advantageous system both to the Government and to the public would be to let the Government continue to maintain their lines for a short time, till the railway lines supplant them, and then to remove that system, and make the saving which would thereby be effected.

735. So as to concentrate the whole of the main lines of communication on to one single set of

of wires along the lines of railway?—Exactly so; gradually to do so.

736. Do you think, from your knowledge of the working of the telegraphic system in this country, that there is also a considerable commercial and general benefit from having the branch lines of telegraph in accord with the branch communications from the main railway systems?—The importance and advantage of that are very great indeed. The small lines act as feeders to the main trunk lines, and it is very much owing to them that telegraphs are profitable in this country.

737. And those feeders at the same time are of great importance to the general line of communication for all other purposes in the country, when they fall into harmony with the railway system?—Yes; a system of telegraphs confined to large towns alone in this country would not be nearly so profitable as they are now, when all the small towns feed them so well.

738. Then you think, instead of having telegraph lines drawn across the country in India, it

would be better to concentrate effort upon the main lines of railways, and to supply the rest of India by branches from the principal stations on the railways themselves?—I think so.

739. Mr. *Moffatt*.] Have you had any personal experience of the telegraphic communications now in India?—I have been there, but have had no great experience.

740. How many lines of telegraph are there actually between this country and India?—There are the Persian Gulf line and the Russian line.

741. Is there any other line?—There is no other line at present.

742. Is there no other line that could be made easily available?—None at present.

743. Is there not a line from Malta to Cairo, going to Diarbekir?—That would be the line to which we alluded before. That of course would form a new route, as far as Diarbekir was concerned, with the present line to India.

744. But as between England and Diarbekir it would be an entirely separate route?—It would.

L. Clark,
Esq.

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Sir JAMES CARMICHAEL, Bart., called in; and Examined.

745. *Chairman*.] I BELIEVE you are the Chairman of the Submarine Telegraph Company?—I am.

746. Yours is one of the two companies employed in this country at present for the transmission of messages between England and India?—Yes.

747. Will you describe to the Committee what you do with a message, say for Bombay, when you receive it in your office in London?—We have four routes to India from our office. We send the message through Paris, Munich, Vienna, and so on to Constantinople; or we send it through Paris and Turin, *via* Otranto and Valona to Constantinople. Or if those routes are at all encumbered we send it *via* Brussels, Berlin, Belgrade, and Constantinople. I should mention that all those routes, with the exception of the Valona route, go through Belgrade. Then there is a fourth route, which is very seldom used, going through a portion of Russian territory.

748. You send your message according to your view of the best way of sending it at the time, either to Brussels or to Paris?—Yes, either one or the other.

749. On arriving at Brussels or at Paris, do they send the message on as they please, or do you indicate the route which the message is to take?—They send it on as they please, unless the message is specially marked.

750. For all that you know, a message that you receive in London may be transmitted from Paris by way of Frankfort and Vienna, or by way of Turin and Valona?—Quite so; I take it that if they found the Belgrade route rather encumbered, they would send it *via* Valona and *vice versa*, unless we marked on the message "*via* Valona," and then it would go by the Otranto and Valona cable, and so on to Constantinople.

751. You charge 5*l.* 1*s.*, do you not, for a message of 20 words to India?—Yes, but we did not fix that charge; that was the rate settled by the Indian Government, and it is the rate which we receive.

752. And which you distribute?—Yes, which we distribute.

753. How much do your company receive of 0.43.

it?—We receive three francs (2*s.* 6*d.*) from London, and 3*s.* 6*d.* from any stations in the country in Great Britain.

754. Do you know what the other parties receive?—We only deal with our nearest neighbour, either France or Belgium; I think the amount is 123 francs 37 centimes and something, which is the rate from Calais to India, and which would make up, with our three francs, the exact amount of 5*l.* 1*s.* 1*d.*, but we only deal with the administration to whom we transmit the message. We settle the accounts with them, and they settle with their nearest neighbour; our charge is three francs, and from Calais to Calcutta is 123 francs 37½ centimes, making a total of 126 francs 37½ centimes, equal in English money to 5*l.* 1*s.* 1*d.*

755. You do not know the Government of India in the transaction at all?—Not at all; at least we do not deal with them; we keep no account with the Indian Government.

756. In the same way, in case of having any complaints to make, of which I believe a great number are sent to you, of messages not being properly delivered, to whom do you address yourselves?—Supposing a message is sent through Paris by either of the French routes which I have mentioned, either by Valona or by Belgrade, we address ourselves to the French administration, forwarding a copy of the complaint, and a copy of the original message, and asking them to trace the error. They immediately ascertain if it has occurred within their jurisdiction; and supposing it has not occurred on the French line, they send that complaint to their next neighbour, supposing it is the Austrian or the Italian line, whichever it may be.

757. I suppose that the Committee may take it as a fact, that messages are sent on as direct from Paris to their next destination, as from London to Paris?—Certainly; you may take it as a fact that there are very few, if any, errors arising on the French territory.

758. I suppose that, generally speaking, the messages which are received from the Continent in English would be correctly rendered?—Perfectly

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fectly correctly; there are very few complaints indeed on that ground.

759. What do you assign as the cause of the complaints which have been made lately as to the length of time, the irregular delivery, and the imperfect condition in which messages are received from India?—It is difficult to assign the cause. I should think that possibly one is the number of different Governments and the different telegraph administrations through which a message has to pass. A message may leave, I have no doubt, an Indian Government Office and be transmitted to the Persian Gulf perfectly correct; then it gets on the Turkish lines, and how much mutilation it goes through on them it is almost impossible to state. Then it comes upon the German lines and goes through various German administrations; and then again either upon either the Belgian or the French lines, until at last the message arrives in England in a very different state from that in which it left India.

760. I suppose that, with the exception of Turkey, all messages, in whatever language they may be sent, are forwarded with considerable correctness in Europe?—No, not at all.

761. You stated, did you not, just now, that messages are generally received in the English language from any telegraph station on the Continent?—I mean from France, or Belgium, or Prussia. No doubt that is the case. I will take Spain and Portugal; I know that so far as we are concerned we would much sooner not have Spanish and Portuguese messages at all. They are subject to constant complaint on the ground of errors and delays, and they are more annoyance to us than profit.

762. Have you not found considerable improvement lately in the time in which messages are received from India?—Yes; I have put down a few statistics respecting the time, which I thought might be interesting to the Committee. The longest time of transmission through the Persian Gulf line has been 17 days, the shortest has been 17 hours; that would be probably from Calcutta or west of Calcutta. I cannot tell what station in India it would be, but 17 days has been the longest time of transmission, and the shortest has been about 17 hours. We average now about 48 hours.

763. I suppose that is about the difference between the times?—No, we allow five hours. There have been lately some favourable instances of quick transmission. For instance, a message arrived in London at 6.12 a.m. on the 1st of April last from Bombay, which left Bombay on the 31st of March at 2.20 p.m., which is 21 hours. Another was received at 6.20 a.m. which left Bombay at 2.20 p.m. the previous day, which makes 21 hours; that is allowing five hours for the difference of time.

764. Have you sent any messages through St. Petersburg for India?—No, I do not think we have through St. Petersburg. The line which goes through the Russian territory branches off. It passes through Myslowitz, then it goes by Tiflis Djoulfa, Tauris, Teheran, Ispahan, and part of Persia; and strikes the Persian Gulf at Bushire. But I think we have had very few messages that way; I think one may say that the bulk of the business which we have to transmit from this country is sent by the Munich, Vienna, Belgrade, Nissa, and Constantinople route.

765. I suppose it is your company which

brings into London most of the messages that are now sent from Egypt?—Yes; they come entirely by us.

766. The Alexandria messages come entirely through Italy, do they not?—Yes, entirely through Italy.

767. Are those messages generally found in decent order?—Yes; they have improved very much lately both in time and correctness; and I find that since the opening of the Persian Gulf line we have had about 300 Indian messages sent by Suez. I am not speaking of Egyptian messages; but 300 from India have come that way.

768. You mean that they have come up the Indo-European line to Diarbekir in Armenia, and then down the new Turkish line to Alexandria?—No; those have come by post to Suez, and thence by the old Alexandria line.

769. How many messages are you sending now to India upon the average?—I think about 150 a week.

770. And how many do you receive?—About 50.

771. Have you any documentary evidence to put in?—I will put in this memorandum relating to the transmission of messages to India through the Persian Gulf cable—(*delivering in the same*).

772. Have you formed any plan for the improvement of the telegraphic communication with India?—Yes, I have.

773. Could you state it to the Committee now?—I think it would be more satisfactory if I were to put it before the Committee in the shape of a memorandum.

774. Sir Henry Rawlinson.] Does the plan which you would propose only refer to the European portion?—Yes, only to the European portion; certainly not to the Indian portion.

775. Sir Charles Bright.] The Belgrade service is very well performed, is it not?—Yes; so far as we know, it is. I believe that the principal delays are in Turkey.

776. If it were possible that special wires could be reserved by foreign Governments and put at your disposal, would not the communication be very much improved?—No doubt.

777. Supposing the line was entirely in your hands or under any other competent English control, direct through to India, what should you consider to be a fair average time for a message to occupy?—It is difficult to say that. No doubt it would be very much reduced. I do not see why we should not work to India as quickly as to any other part of the world. With good insulated lines, and with English or French telegraph clerks, I should think that we might certainly reduce it from 48 hours to 24, and send the messages correctly besides.

778. I suppose you consider that the traffic would be very much larger if the service were done better?—No doubt. I believe that the traffic is simply very small from the reason that merchants employing the telegraph cannot rely upon the messages being correctly sent. It very often happens that a message arrives in a state which is utterly unintelligible.

779. Mr. Moffatt.] You spoke of the gentlemen finding a great many errors and misrepresentations in telegrams received through the German administration, through that part of the system which is managed by the Germans?—I think it was Spain and Portugal to which I alluded.

780. Do

780. Do you find that Spanish and Portuguese telegrams are very much inferior in accuracy to the messages which you receive from the north of Europe telegraphic communications?—Yes, very much.

781. Have you had any practical experience with regard to the management of telegraphs in India?—None whatever.

782. You have not been there?—No.

783. But have you sufficient experience to know that the work is done with exceeding irregularity and great inaccuracy?—That I cannot say, as regards India itself; but I know that messages coming from India arrive in a very mutilated state.

784. Have you any means of tracing where those inaccuracies arise?—We have to a certain extent, and we do trace them.

785. To what extent do you trace them?—I think that we have now got 109 complaints under investigation of inaccurate telegrams from India, and those are mostly under the consideration of the French Government; and the general answer is, that the mistake does not occur in their jurisdiction, and that they are trying to find out where it did occur.

786. But have you no power of tracing beyond the French Government?—No; when we hand it to them it ceases to be in our jurisdiction. As you are aware, the telegraphs belong to the different foreign Governments, and we have no control over them.

787. Sir Henry Rawlinson.] I believe that all the continental powers are bound together by the two International Telegraph Conventions of Brussels and Paris?—Yes; there was one signed at Berlin originally, and there was one signed last year at Paris.

788. They are all bound together on the other side of the Channel as far as the Turkish frontier?—Yes.

789. The lines intervening between the Dutch coast and the Turkish frontier are all included in that convention?—Yes, they are, I believe.

790. But England is not included in that convention?—No.

791. Therefore, England is the only European power which is excluded?—Yes; but the English Government possess no telegraphs of their own, and therefore they could not become part of this convention.

792. What is your course when you have to complain of irregularities?—We simply forward the complaint of any merchant or of any gentleman; we send a copy of the complaint with a copy of the original message to the office from which that message was originally sent. Supposing it was transmitted to Paris, and through Paris we send to the French administration; and supposing it was transmitted to Brussels, and through Brussels we send it to the Belgian administration, and request them to institute proper inquiries.

793. I presume that if the English Government had been a party to that convention, you would have applied to the offices of the English Government instead of to the different bureaux?—Yes; but supposing that the English Government had telegraphs of their own in this country, we should not have been in existence; we stand as a private company trading with foreign Governments, and we have no Government to back us.

794. If the English Government had merely been a party to that convention with regard to the transmission of their messages from England through the Continent to the Turkish frontier, then of course the English company would have had the advantage of making the inquiry through the Government officers, instead of applying direct to the bureaux?—Yes; but I do not see how the English Government could have become a party to that convention, not possessing a telegraphic system of its own. On the Continent all the telegraphs, like the Post Office, are in the hands of the Government; in fact, like the railways; and on the Continent they have a distinct administration of their own, but we have nothing of that sort in England.

795. Are there no private telegraph companies throughout the whole of the continent?—None that I am aware of.

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HENRY NELSON, Esq., called in; and Examined.

796. Chairman.] ARE you engaged in business in London?—I am.

797. In what firm?—I am partner in the firm of Crawford, Colvin, and Company.

798. And have you also resided in India for some years?—Yes, for 17 years.

799. You have had great practical experience in the working of the present telegraphic system with India, have you not?—Yes, I have had a great deal of experience.

800. I believe there is not a transaction in business, whether of purchase or sale, that is not now transmitted to India by telegraph?—For the most part it is so. There are some articles which it is not thought worth while to telegraph about, but for all the important staple articles, such as cotton, every sale, say of 50 bales of cotton, or 100 bales, is advised by telegram now.

801. There is a practice now which has been very largely introduced within the last few years, is there not, of selling goods on the water?—Yes.

802. Will you describe to the Committee the manner in which the use of the telegraph is applied in that case?—I will suppose a purchase of cotton to be made from Liverpool; the person

043.

who wishes to purchase the cotton makes his arrangements with the agent of the firm on the spot, on the condition that it is to be telegraphed through immediately from Liverpool to, say, Bombay. The terms are agreed upon by a sort of letter which passes between the two. A telegram is sent immediately, the charges being paid by the purchaser, who also guarantees to pay the charge for the reply, and as soon as the reply comes it is made known to him: and I am aware of several cases where the cotton has been ordered and purchased, the purchase advised and the cotton sold again within three weeks; and if the telegraph lines had been worked a little more rapidly than they have lately been it could have been done in a week.

803. That is to say, a spinner in Lancashire could order his cotton from India, and could be assured of the purchase having been made, and have the satisfaction, perhaps, of knowing that he had been drawn upon, all within a week?—This being drawn upon would depend very much upon the instructions. If he were not drawn upon until the cotton was shipped it would be a long time; but if he sent orders to draw upon him immediately

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mediately he would hear of his having been drawn upon, as well as of the purchase having been made, and that might very well have been done in a week, because, in my own experience, last week we have had an answer to a telegram within four days.

804. In the case of goods shipped from India, consigned to this country, it is the practice to sell those goods on the water, is it not?—Very frequently. Whenever a profit is found to be made by sale for arrival, it is very frequently availed of; sometimes, as during last week, losses have been made in the same way.

805. Frequently it is the case, is it not, that a shipper telegraphs to his consignee in England that he has sent him so many bales by a certain vessel, and that he is at liberty to sell immediately?—Yes.

806. And the cotton is so sold?—Yes.

807. As mercantile profits consist of remuneration for capital and labour, and compensation for risk incurred, is it not the case that where the element of risk is taken out of the transaction, the owner of the cotton can afford to take a less price for it?—Undoubtedly that is the case. Taking a series of operations there is great economy in price in the use of the telegraph.

808. Therefore a spinner in Manchester who buys cotton on the water is able to assure himself that in all probability he will have cotton at a certain time, and he gets the cotton cheaper?—I think that that is unquestionable. Over a large series of operations there must be great economy in the price to the consumer.

809. Therefore the use of the telegraph is a very great economical advantage to commerce?—No doubt of it.

810. But the value of it depends, does it not, entirely upon its accuracy and certainty?—Entirely so.

811. In your own business you must, I presume, have known many instances of messages arriving in a condition perfectly useless?—Yes; the ingenuity of the perversion of telegrams, I think, is something wonderful; and the mistakes which are made are extraordinary. I can give the Committee one within my own recollection, where the sale of 294 bales of cotton was telegraphed, and the figures 294 were converted into the word "stesi."

812. In the interests of our commerce with India I presume it is your desire, and in that respect you represent the feeling of the community at large, to see this telegraphic communication made as perfect as possible?—No doubt of it; and I may add that it would be much more availed of. I think I may say, from my own business and experience, that I should despatch three times the number of telegrams to India that I do now, if we could rely upon their arriving with a moderately fair speed, and with certainty as to correctness.

813. The advantage consists in preventing loss as much as in making gains, does it not?—Yes; the uncertainty of course often creates loss. I have known many instances of loss being incurred by the improper rendering of a telegram. I may say that there is another loss now which has occurred under the present system, and that is, that my firm is in the habit of sending important messages in duplicate, and paying double in consequence. We wait for two days, and then we send the message again, so that it costs us twice the price that it otherwise would do.

814. You find, as a matter of experience, that it is worth your while to pay 5 l. 1 s. frequently, for conveying messages in individual transactions?—No doubt of it, because those individual transactions are an index of very large operations. More is to be learned from the advice of a sale than from any market intelligence that you may send.

815. Then it is the fact, is it not, that the post of India has become, in a certain sense, subsidiary to the telegraph?—Yes; so much so that East Indian letters, I think, usually begin with a statement of the telegrams which have been sent and received, and all references to the markets is merely complementary, and fill up the outline which has been sketched by the telegrams; the real news is in the telegrams.

816. Under these circumstances, it becomes very desirable, does it not, that the commercial interests of this country and India should be relieved of entire dependence upon the continent of Europe for the telegraphic communication?—I think it would be a most important thing, if we could have a British line throughout, but of course that is a matter of very great difficulty.

817. Do you find great difficulty in making reclamations upon the present companies?—I do not think that we ever get any reclamations for blunders; we never get any answers. We have tried the two routes by way of comparison, and we take notes of the respective sins and the blunders that they make, and the first thing we do when we get a complaint about a telegram, is to send a clerk to the office; he is received by a dirty little boy who looks through a little hole something like a railway pay place, and says that he knows nothing about it, and he seems rather glad that he does not know anything about it, and there he hopes the thing will end; then we write a letter to the secretary, and the secretary says that he is exceedingly obliged to us for calling the attention of the company to this blundering, and that he will pass it on to the next station.

818. But in the end, although the telegraph companies take a great deal of trouble about it, you get no compensation, do you, for messages incorrectly rendered?—We sometimes, but in a very rare case, get the money back; but that has only been the case, according to my recollection, where the telegram has been longer going than the letter which advised it. We have had several instances of telegrams being delivered in India after the receipt of the letter which had gone by post, and which contained a copy of the telegram; in that case, we have always applied for the money immediately, without any further explanation, and they have been obliged to pay it back after taking about three months to make investigations.

819. As matters now stand, in the event of continental complications, such as a war between Austria and Prussia, or anything happening in Turkey, our commerce would be in a very uncomfortable position, if telegraphic communication with India was at an end?—Yes; we should then have to resort again to the Mediterranean line by Suez.

820. But even that mere fragmentary mode of communication was very serviceable?—Yes; it was used exactly in the same way as the telegraph is used now by the Persian Gulf; it was used probably not to the same extent, but to a very great extent. It could not be used to the same extent, because it was not daily; it was dependent

dependent upon the steamer running from Suez to India, and consequently it was no use telegraphing, except to overtake the departure of the steamer from Suez.

821. You send a message from London to overtake the mail at Suez?—Yes, but that did not make it a daily communication; now we have a daily communication, and we can telegraph any day we like; but by the steamers we can only telegraph according to their departure from Suez.

822. During the time that you were at Madras, had you reason to be satisfied with the manner in which the Peninsular and Oriental Company performed their contract?—I think, on the whole, I was. There was a great deal of grumbling in the newspapers, and so on; but I think the mercantile community were very well satisfied with the way in which the mails were carried.

823. You were a party, were you not, to the representations made to the Postmaster General for the establishment of a weekly communication to Bombay?—Yes, I was.

824. And also to the Postmaster General in India?—Yes; in India I made a similar suggestion, under rather different circumstances, about seven years ago. I was then chairman of the Chamber of Commerce of Madras, and I wrote to the Postmaster General there in reply to a Government communication regarding a weekly mail from London to Suez. At that time the railways across India were not constructed to anything like the extent that they are now, and therefore Suez was the best point of departure for Calcutta, Bombay, and China, and the suggestion was for a weekly mail from London to Suez or Aden, and for the other mails to branch from there. Now, our later suggestion is for a weekly mail from London to Bombay, considering that the importance of Indian correspondence is probably the greatest, and that the other steamers may fairly take their departure when the Indian steamer arrives at the point where they have to separate.

825. You think that the whole of the Indian postal service should be conducted through Bombay?—I think it should now, on account of the railways being nearly completed.

826. You are aware probably that the Post Office have insisted upon an increase in the rates of postage, in order to enable them to make up the increased amount which it is supposed the service will cost?—Yes. I protest very much against that. I think it is wrong in principle; I think that the service rendered to Government by the postal steamers is of enormous importance, for which they pay little or nothing, and that if the Peninsular and Oriental Company were to strike next week, the Government could not send a despatch to the admiral on the China station without sending a frigate out with it. They do not seem to consider that, when they talk about raising their rate of postage, as they did the other day, to 1 s. 3 d., they wish it to pay for the good government of India, and that they wish the post letters to bear the charge of rapid communications which contribute in so important a manner to the defence and good government of our Indian empire.

827. It was stated the other day in evidence that the difference in the amount paid under contract to the Peninsular and Oriental Company and the amount charged by the Post Office in the shape of postage was about 48,000 l. per annum; 0.43.

do you think that that would be generally considered by the public as a very large sum to be borne by the Exchequer of this country, as representing the cost of maintaining the political connection between this country and India?—No, I think it quite trifling. Suppose they had to send all their despatches in men of war; that would be a very heavy charge to the country.

828. Probably you would be surprised to hear that at the Post Office the question is considered not so much with reference to convenience to the public and to mercantile interests as to the amount of additional loss as it is termed which would be imposed upon the Exchequer if this weekly communication were established?—The ability to send despatches to their servants by the Post Office boats is as much a matter of defence as a line of battle ship is, and it would be absurd to expect a line of battle ship to pay its own expenses. On that ground I say it is a mistake to suppose that the Post Office should pay its own expenses in a long sea service.

829. Mr. Moffatt.] You stated that the telegraphic communication had lately very much improved; in what respect has the improvement been?—I believe the improvement has dated from the motion in the House of Commons for a Committee on the subject, and we trace it entirely to that. I have in my hand a paper beginning in February and ending with to-day, in which the length of time of the transmission of telegraphs is shown. One on the 8th of March took 11 days from Madras; then there was an exceptional one which took one day to come from Bombay, then three days; then the next took five days, the next five days, the next five days, then two days, then four days, then one day, then two days, and then two days.

830. What was the average time in last year that a message from Bombay took to reach you?—I cannot speak with any exactness, but I am pretty sure it was about 12 days as near as possible.

831. So that they have improved in the decrease of time to the extent of over 100 per cent. at the least?—Yes, certainly.

832. Have you any mercantile relations with China?—Yes.

833. Can you give the Committee any information with regard to the telegraphic communication with that country?—I do not know that I can give the Committee any information, because I have not thought upon the subject. The practice, now, I believe, is to telegraph through India to Galle, and from there to send it on by steamer.

834. Would not it be of very great importance that there should be also as good telegraphic communication as practicable between China and India, and thence to England?—Yes; undoubtedly.

835. And also from Ceylon to China?—Yes, the China trade is enormously valuable, and it would be benefited materially by good telegraphic communication, and the Japan trade also.

836. Mr. Weguelin.] There is no telegraph to Singapore, is there?—No, there is not. There is one in contemplation to use up some cable that did not answer elsewhere. I believe the telegraph exists a considerable way down Moulmain.

837. If it were completed to Singapore, it would save a considerable time, would it not, comparing it with the time occupied in sending despatches from Galle?—Yes, no doubt it would be,

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be, certainly, a saving to the China trade to have a telegraph to Singapore; and it is well to remember that the articles of produce exported from China are exceedingly valuable; silk, tea, and so on, which will bear the expense of many telegrams.

838. Sir *Henry Rawlinson*.] Does your observation with regard to the improvement of the telegraph of late times refer to accuracy as well as to speed?—Yes, it does; they have come in very much better order during the last month; so much so, that we have had one or two telegrams without a single mistake.

839. Are you able to say whether that improvement refers to the European portion or the Asiatic?—No, it is impossible for anybody to say where it is, but I have a suspicion that a great deal of the previous incorrectness existed on the line from Bombay to Kurrachee, and I think that they have heard about this Committee, and that they are very particular now as to sending messages on the north-western part of the Indian line. My judgment upon that is arrived at from my experience in India of the sort of mistakes they used to make there. They were nearly all phonetic, and many of the mistakes that we have now are phonetic, arising from people reading out a message one to the other, and being imperfectly acquainted with the language.

840. Mr. *Ayrton*.] That is to say, the one not being able to spell the word as the other reads it?—Yes, not being able to spell the word, or fancying that another word was said.

841. Mr. *Wequelin*.] Was there any suspicion of bad faith?—In India corruption is the only word for it. I know of many instances, and, in fact, only lately a man has been sentenced to labour two years on the roads for corruption in a telegraph office. There have been many Government prosecutions already. The principal corruption was between Bombay and Galle on account of the opium messages.

842. Mr. *Moffat*.] Are any of the telegraphs in India in the hands of the Government?—They are entirely in the hands of the Government; there are no telegraphs permitted except Government telegraphs.

843. Except those on railways for the purpose of those railways?—Precisely so.

844. Mr. *Ayrton*.] Those lines are not in communication with the Persian line?—It is my impression that they have nothing to do with European messages.

845. Sir *Henry Rawlinson*.] I observe that the great improvement in the communication, according to the reports that have been presented to us, may be dated from last February?—According to my statement it commenced in March, and it has been gradually improving up to this very time.

846. That does not quite agree with the reports from the superintendent at Constantinople, one dated the 26th of February and the other dated the 21st of February, who states in the report of the 26th of February: "During the last three or four weeks the communication by telegraph both to India and to London has been surprisingly regular and prompt, messages either way scarcely ever occupying more than one day," that is two days for the whole line?—Yes, perhaps so.

847. I observe in reference to the same subject, the officer reports from Constantinople that he sent a message direct to Kurrachee, the

acknowledgment of which was received back at Constantinople three minutes afterwards; do you think that a statement of this sort is to be received as authentic, that a message would be sent from Constantinople to Kurrachee, and back again from Kurrachee to Constantinople, the acknowledgment of it should have taken up no more than three minutes?—I do not like to give an opinion about a professional matter with which I am not acquainted; I do not know.

848. Mr. *Ayrton*.] Are the commercial relations between England and China very much mixed up with the commercial relations between China and India and England and India?—Yes, there is a sort of triangular commerce constantly going on between the three countries.

849. Therefore all the relations of China are very much interwoven with India for the purposes of business?—Yes, and of course they would be much more interwoven if we had the means of communicating with China by telegraph; the banks especially would use them to a very great extent.

850. Is very much importance also attached to the relations and the arrangements to and from Western India, China, and England?—Undoubtedly; the Bombay merchants have a large trade with China, and a large trade with London.

851. Do you think if the China mail were brought in direct communication with the weekly mail to Bombay, it would be a great advantage to general commerce from the relations which you have mentioned?—I think that the China mail must go to Bombay; it may go to Aden first, but it must go to Bombay eventually; I think that the China mail must always have its head-quarters at Bombay, on account of the docking of vessels and repairing them. There are a great many things about this which probably the Peninsular and Oriental Company could tell you better than I can, but I doubt whether the line from China could terminate at Aden.

852. Do you think that it would be the most desirable course, in the first place, to concentrate all the effort in a direct line from Suez to Bombay?—I do.

853. And that that should be a line of the greatest speed, and with all the power that can be brought to bear upon it?—Undoubtedly I do.

854. So as to get letters as quickly as possible at Bombay for distribution in India?—Yes.

855. Is it your opinion that if the whole effort of India were concentrated on that direct line, it might be carried on at a high speed with tolerable economy?—I cannot answer as to economy, because I am afraid there would be a large expenditure for better steamers required.

856. But, on the other hand, from your knowledge of India, do you think that if the whole stream of passengers from all parts of India were brought down upon Bombay to go direct to Suez, the economy which would result from that, as well as the regularity, might induce so large a number of passengers as to admit of a considerable increase in the power and size and speed of the vessels?—Undoubtedly they would get very many more passengers, and they would be able to employ larger boats profitably.

857. Bearing that in mind, and assuming the railway communication to be made through from Bombay to Madras on the other side of India, do you think that a line of steamers could depart from Calcutta just as well as from Bombay profitably

fitably to China, touching at Madras, or touching at any point on the coast to take in the mails?—I am afraid that there would be a loss of time if they did not start from Galle; I presume the Honourable Member means in supercession of the Galle route as it exists now.

858. Yes. You stated that it would be desirable to concentrate the whole mail effort on Bombay?—Yes, but am I to understand the Honourable Member to mean that all the correspondence and passengers for China should go through from Bombay to Calcutta.

859. I mean that Madras should be the point of departure on the Eastern coast if the line of railway is extended to Madras from Bombay?—I do not feel competent to express an opinion upon that. I think that one of the large steamboat companies could give you a much better answer than I can on that subject.

860. Personally, do you think that it would be a great advantage to the community if they had the opportunity of passing through such places as Bombay and Calcutta on their way to China, between China and England?—I think that for persons going to China, and also for postal communications, the route to China should be the shortest, and I doubt whether the route through India would be the shortest. I think that the route from Aden through Galle is the one which would still be maintained.

861. You would go down the coast from Bombay to Galle?—No, I think they would prefer to send the China steamer from Bombay to Aden, to await the arrival of the Bombay mail from London, and start away from Aden immediately that mail arrives to go from Aden to Galle.

862. Then you would lose a considerable amount of the contribution in the concentrated effort between Bombay and Suez direct?—That cannot be helped; but I do not think that anything would induce China passengers to go through Calcutta, unless they were driven there.

863. Do you think that if they could get a direct line from Bombay to Suez at great speed, that would not be an inducement to them to go across India, if they could do so conveniently, by the railway?—I am not able to form a very correct opinion upon this question, but I think there is so much to be done in looking after the baggage, that the route between Aden and China would be preferred by any person who could avail himself of it. I think, as a matter of time, and as a matter of expense, and also on account of the trouble of shifting about with baggage from the steamer to the railway, and so on, the direct route from Aden would be preferred.

864. Have you been much backward and forward between India and England?—I have made the overland route six times.

865. Do you find that, after a sea voyage of seven or eight days, it is an unpleasant thing to get out of the steamer and get on land?—No, but, it is a very inconvenient thing for ladies and children. For a man by himself there is probably no great difficulty or exertion involved, but, for a family, every change from one ship to another is to be deprecated.

866. You think that it would be a serious inconvenience after a long sea journey?—Yes, a railway journey of three days from Bombay to Calcutta would be a serious thing for children.

867. But from Bombay to Madras the journey would be only two days?—From Bombay to

Madras would be nearly as bad. I do not think that there is much difference in the length of the journey.

868. But do you think that in postal arrangements we are to look to the comfort of women and children, or to consider the economy of the service?—You asked me, as a question of profit, combining passengers with high speed and large ships.

869. If that line were to be adopted you think that the inconvenience would be such that you might not reasonably sacrifice so much for the general interest?—To put it in a short way, if there were a double line going, the one from Aden to China, by Galle and Singapore, and the other from Aden to Bombay (let it be ever so fast) from Bombay by railway to the eastern side of India, with a fresh embarkation to China, I am quite certain that the steamer which went from Aden to Galle direct would have all the passengers.

870. Have you ever been down the coast from Calcutta to Galle?—Yes.

871. Have you not found a great desire on the part of the passengers to get out of the steamer at Madras, and to go on shore?—Yes.

872. And at Galle, in the same way?—Yes.

873. Do not they find it a very great relief?—No doubt; but then you must consider their convenience, and their health, and their packages.

874. And are not the ladies generally very clamorous to get out of the steamer?—They are always very glad to do so except when there is a very high surf.

875. Supposing that, by concentration of effort, you got economy and cheapness of conveyance, do you not think that that would be an element in the consideration?—I am afraid that all the advantages that you speak of would be lost as against the great difference of distance and the great difference in expense. The distance would be considerably more. There could be no question about it.

876. But would distance be an element except as measured by time?—Yes, measured in any way it would be a loss, the expense depends upon the distance.

877. But would you not also be able to keep down the expense if you had this large number of passengers which you would get by bringing them all into one stream?—If you ask me commercially I think it would be a very bad speculation indeed to send the China traffic through Calcutta or Madras.

878. Is there much merchandise brought from China by steamboat to London?—Yes, a great deal of silk and piece goods and other valuable commodities. The freight is very high; although I do not remember what it is.

879. Is there not also a large trade from Calcutta to China in valuable goods?—Undoubtedly a very large trade.

880. Is there enough to support a steamboat independent of the English mail?—There are steamboats that run now, but they are private property; they belong to some large China houses, Jardine & Co., and Dent & Co.

881. Are there not also steamers running from Bombay on private account to China?—I believe there are now; but I am not able to state positively that that is so.

882. Considering that the steamers are now going without subsidies to China, do you think that, with the addition of the subsidy, for the mail

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to India itself they would not be able to carry on the China mail?—No, I think not; I think that the subsidy required would be something enormous. I may state that those private steamers are kept for opium speculations, and therefore they do not depend for defraying their expenses upon the ordinary sources.

883. But if the opium could be sent across India rapidly, considering its value, I presume that there would be very little difficulty in shipping it at Madras, or at any other point of departure on the other coast as well as at Bombay?—No, except that probably the Government might raise objections on the score of smuggling. Madras is not allowed to grow opium now just for that reason.

884. But if the chests were sent sealed in the usual way by railway for through traffic, that objection would be obviated, would it not?—No doubt it could be arranged.

885. Is it your opinion that no Indian mail could sustain with a moderate subsidy a regular mail communication with China?—Yes, that is my opinion. I think that the subsidy required for such a service as the Post Office service between India and China would be enormous; so large that the Government would not think of offering it.

886. Mr. Turner.] I suppose that those large opium houses are very jealous of interference by any other parties; and in many cases they refuse to take passengers and cargo?—Yes; their despatches are always private, and very frequently their destination is secret.

887. And in fact they keep it as private as possible?—Quite so.

888. Mr. Laird.] You think that you could not divert the passenger traffic from Aden to China by way of Bombay?—I think not. I may be wrong, but that is my impression.

889. If the number of passengers were reduced and the cargo went the other way, would not the cost of postal communication with Bombay be very much increased, and would not the company require a much higher subsidy if they were deprived of the passengers by the existence of two routes?—No doubt. I do not think that any subsidy would keep the steamboats going on if they had no passengers.

890. Except that there would be the passengers to Bombay? If I clearly understand the honourable Member's question, I think it is this, that if the passengers from Aden to China, *viâ* Galle, were taken away from that route, the subsidy then which is paid by the Government to the Peninsular and Oriental Company would have to be very much raised. No doubt it would have to be raised beyond all calculation.

891. Mr. Turner]. In fact, you think the cheapest, most economical, and best plan is for Bombay to be the principal port for letters, and that they should go on from Bombay to Calcutta, and from Bombay to China?—I think that for India the only proper route is by Bombay, and for China and Australia the proper route is by Aden and Galle.

892. Then, in that case, you must have one line of steamers from Aden to Galle, and another from Aden to Bombay?—Yes; I think that the principal line should be to Bombay, and that it

should stop there, making it a sort of express train running through, and that it should drop all the Australian passengers and all the China passengers at Aden, and it should not be bound to wait for the arrival of any steamer from China or from Australia; but that if passengers were too late for the steamer which runs from Bombay to England express, those passengers should wait for the next mail.

893. Chairman.] Would they not have to wait a week under the weekly system?—Yes.

894. Mr. Turner.] Passengers for Australia and China would go direct from Aden to Galle?—Yes.

895. Mr. Ayrton.] You will observe that that system involves, does it not, having a steamboat always running between Bombay and Aden empty or partially empty, for that part of the journey, and yet large enough to receive the great influx of passengers to be carried from Aden to Suez?—I stated, in a former part of my evidence, that I feared that Aden could not be made a *dépôt* or a terminus of the China line, and that I feared that you would be obliged to send the boats on to Bombay to be docked whenever they required it, and I still think that that will have to be done. But that can be done by means of reserve boats.

896. Do not you think that it would entail a very enormous amount of expense upon the whole postal subsidy, if the company had to run boats from Bombay to Suez large enough to take in the whole influx of passengers at Aden, and that it would involve their running half-empty ships between Aden and Bombay?—Except this, that by a weekly mail you would probably make arrangements for some of them to go by each boat. If you have steamers of very high speed to run to Bombay they must be very large.

897. Would not this be the result, that if they were of a capacity enough to take in this influx of passengers in the Australian and China business, there would be a great waste of power, at all events, in the journey between Aden and Bombay?—It might involve the necessity of sending an extra steamer from Suez to Aden sometimes as they would be so crowded with Australia and China passengers.

898. Do you think that, if all effort could be concentrated on Bombay, by a steamer going up from Galle to Bombay, and there landing the passengers, that would be an economical arrangement?—I do not feel sufficiently acquainted with the subject to give an answer about that.

899. But that would probably obviate the difficulty in expense, would it not?—I think that the officers of the Peninsular and Oriental Company would give the Committee the best information about that.

900. Can you give the Committee any idea of the comparative value of the exports from India to China, and Europe to China?—No, I cannot do that. I am not so much in that trade as to be able to do so.

901. You are probably not aware that more than two-thirds of the value of the produce exported to China goes from India to China, as compared with less than one-third from Europe to China?—No, I should not like to say anything upon that subject.

WILLIAM HAMILTON CRAKE, Esq., called in; and Examined.

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902. *Chairman.*] You are a Member of the Firm of Parry and Company, of Madras?—I am.

903. Have you resided in India for many years?—Yes.

904. When did you return from India?—In July, last year.

905. Have you found that the introduction of the telegraph between India and Europe has caused much alteration in the mode of carrying on business?—Certainly, a very great alteration. The transactions both in the produce and in the manufactures of this country are affected very directly by telegraphic communications. It is not too much to say that all transactions are based upon the advices which reach the Indian merchants by telegraph.

906. You speak of transactions in produce, and in manufactured goods from this country, perhaps you do not exclude the great monetary transactions between the two countries?—Clearly not; they are as much a part of the market as any article in which business transactions are carried on.

907. The dealing in public securities and so on?—Yes; also the course of exchange, the value of bullion, and such like matters.

908. Have you not found very often, that those transactions through the telegraph, are brought to completion before the written communications are received?—Certainly so; the transactions, as far as the purchase and the actual closing of the bargains are concerned, are in almost all cases completed prior to the receipt of the postal advices, and it may be, that the actual shipment may be completed, also very frequently that occurs, but the transaction is concluded prior to the receipt of the postal communication, and that makes the telegraph of so much more vital importance.

909. When you were in India, did you find great advantage in the conduct of your business from the power of communicating with your agents by telegraph?—Most material advantage.

910. Not only I suppose in the receipt of market advices from this country, but also in sending your instructions as to the disposal of your goods on the way?—Yes, quite so; and one most remarkable effect which it had in altering the character of the business was this, that prior to the introduction of telegraphic connection between Europe and India, the direct transactions of European houses in India were comparatively rare, whereas now, from their ability to transmit orders direct to India, they deal as principals in our markets, much more frequently; that is to say, orders from Europe are far more rife than they were prior to the introduction of telegraphic communication with India.

911. That is to say, you, residing at Madras, would receive through the telegraph, an order for a shipment of cotton on English European account?—Yes; in fact, it places European buyers as principals in our market, in a way that never obtained before, and has led to a vast number more orders being sent from Europe than could have been the case when the communication was carried on entirely by means of the post.

912. *Mr. Weguelin.*] It rendered the business safer?—Yes; it struck out an element of risk.

913. And all business can be conducted properly.

bably with a smaller capital?—The tendency of it is in that direction.

914. *Chairman.*] Upon that point is it not the fact that a man can ship any quantity of cotton, say 500 bales of cotton, from India, advise the shipment by telegraph, and then receive in the course of a few days advice of its having been sold?—It is quite possible.

915. And then he is freed from all mercantile risk in the matter?—Yes.

916. And he is able then upon his own credit to renew the operation?—Quite so; he has, in fact, disposed of his first interest, and he is free to repeat it.

917. I suppose a man shipping 500 bales of cotton on consignment to England from Madras advises his correspondent in England by telegraph that 500 bales of cotton have been shipped in such and such a vessel, and authorises his agent to sell that cotton at once on the water; he does so and telegraphs a reply back to his principal, who is then enabled immediately to repeat his operation, having drawn against the first shipment?—Yes, it is perfectly competent for a man in Madras or in the Indian markets to carry out the operation that you sketch.

918. That is not unfrequently the case?—Certainly not.

919. *Mr. Ayrton.*] Are we to understand you to mean that having received authoritative advice that a sale has been made which is profitable, when he has news that the result is profitable to him by having that information, he can gain credit for a new operation?—Yes. A shipper having obtained advices of the sale of his first shipment is in a position, if he so desires, to repeat that operation. Instead of waiting for the course of post weeks and months, for the cotton to go round the Cape, and the time that must elapse in that, he obtains his advices by telegraph, and is in a position to renew his operations; and, knowing the fate of the first consignment of 500 bales, instead of believing himself to be the owner of 1,000 bales, if he had repeated the operation, he would know that he had sold the first 500.

920. Therefore, he can conduct more business with reference to his own funds, and the risk is diminished to that extent?—Yes.

921. *Chairman.*] It is within your knowledge, is it not, that that which I have sketched out is an every-day occurrence?—Yes.

922. Therefore, it is of the utmost importance that the telegraphic service should be as reliable as possible?—Unquestionably.

923. Have you found reason to complain of the manner in which the telegraphic service in this country and India has been carried on?—Yes, I must say so.

924. Do you find it better now than it used to be?—In the last few weeks there has been a wonderful improvement, not only in the regularity of the messages, but in the time they have taken in delivery.

925. With regard to the local service in India, you, when residing in Madras had a good deal of experience, have you not, of the manner in which messages were sent up from Galle at the time when the messages were taken on from Suez by the mail boats to Galle?—Yes.

926. Did you find much to complain of with regard

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regard to those messages?—It was the subject of general note for a considerable period, that whenever a mail arrived at Galle, supposing it was bringing important intelligence, there was invariably an interruption on the line of some sort or other; that occurred almost as regularly as the mail.

927. Had not one or two messages found their way forward before the interruption took place?—It was difficult to trace; but no doubt there were motives existing for tampering with the lines, and there was unquestionably a great deal of corruption; at least, it was attributed to that.

928. There was a great deal of suspicion, was there not, of the integrity of the employees in the telegraph office?—Yes.

929. Of course you limit that to the persons in the lower departments of the office in India?—Quite so.

930. On the whole, you have not a very favourable opinion of the manner in which the intended telegraph system generally is carried on, have you?—It has been a very large service to organise in a comparatively short time, and it has been progressing so rapidly in India that no doubt the departments have the greatest difficulty in coping with the undertaking, which they have in hand; at times they have miserably failed to conduct the business, but whenever it has culminated and called for the direct interference of Government, or brought down special notice on the department it has immediately improved. I think it is within the knowledge of most people connected with India in the last few weeks, that it can be conducted with greater regularity and speed, and that there are the means of doing so there is very little doubt. Probably one great source of its failure in India has been the exceedingly poor pay that has been given to the subordinates in the office. There has been a sort of effort to make it too soon in its career a paying department, and probably the low salaries that are being given have led to much of the mischief that has accrued.

931. Do you think there is great difficulty in tracing the causes of errors?—The great difficulty both on this side and in India always was, to get anybody or any department to be responsible for any errors; we never could attach responsibility to anybody; we never succeeded in doing it; and a suggestion which I would venture to make is, that some system should be organised with all the several telegraphic departments, that whenever a message is forwarded either to or from its sphere, a copy of that message should be forwarded to a central office, so that the portion of the line on which the error first occurred might be detected. It appears to me that the Post Office offers a ready means of checking in some measure the great difficulty which we have in getting anything like accuracy in messages.

932. But there would be no necessity for that, would there, in the event of our having a telegraph service from this country to India, independent of the Continent, in our own hands, and under our own management?—I think it would certainly be necessary to have several repeating stations, even if it were under one company, and even if it were under one organisation; and at each repeating station I would ask that the officer should be obliged to transmit the form of the message in which he either received or forwarded it.

933. Do you not think that it would increase

very greatly the labour on the part of the establishment to have to do that?—I think not.

934. *Mr. Ayrton.*] You mean that where it was repeated by the operator, he should take down the message?—Yes, and they do so now; all messages are copied in the office, so far as I am aware.

935. Is it not the case that messages are repeated without being taken down, or it may be a self-repeating station?—I was not aware of that, I thought that they were all taken down.

936. *Chairman.*] Does your experience justify you in expressing your approval of the time and the manner in which the Peninsular and Oriental Company conduct their postal service on the other side of Suez?—I think so on the whole; I think that all must admit that the postal service of the Peninsular and Oriental Company is properly conducted and admirably done.

937. You do not approve, I presume, of the steamers having to wait at stations for others to come up?—Certainly not. It has been my experience to remain five days at Galle waiting for a broken-down steamer. It has always been a mistake that the main lines of postal service between India and England should be subjected to long detentions for what may be termed subsidiary lines, such as the instance which I have mentioned.

938. As a matter of practice, you would render the grand Indian postal service between Suez and Bombay entirely independent of other services, so far as having to wait for them is concerned?—Quite so. That hardship of waiting for the following steamer is reduced to a minimum now by the frequency of the services from India.

939. *Mr. Ayrton.*] Have you travelled much in India by railway?—Yes; in my own Presidency of Madras.

940. Have you made any long journeys?—I have been many times across the Peninsula, between Madras and Calicut.

941. Have you experienced any difficulty in travelling in India by railway as compared with travelling in this country?—Yes, the fatigue is greater; which is, no doubt, due to the climate and the greater distances. Personally I did not suffer fatigue.

942. In what sort of carriages have you been in the habit of travelling, saloon carriages or compartments?—Both. So far as the railway with which I am best acquainted is concerned the carriages are admirable.

943. Have you ever considered the expediency of using Madras as the point of departure for the mails farther east?—I should never think of it in that light.

944. You think that it would be too irksome for people to go across the Continent, from Madras to Bombay, and proceed on their journey further eastward?—It is open to this serious objection, that for some months in the year, in the monsoon months, in the south-west monsoon months, the Madras coast is not easily approachable; and practically it is closed, and no shipping communication between Calicut and Bombay during these months.

945. My question had reference to communication by railway?—It will take some years yet before that railway to Bombay from Madras is completed.

946. That is a separate matter; but supposing that you had the railway communication complete

lete between Madras and Bombay, have you ever considered the expediency of making Madras the point of departure for communication further eastward?—Any consideration that I could give to the subject, as far as I understand it, would be adverse to such arrangement. Madras in itself has but few resources for steamers; it is no harbour.

947. The Peninsular and Oriental Company's steamers for Calcutta all stop there, do they not?—Yes.

948. And from beginning to end, I believe, no inconvenience has ever been experienced with regard to the receipt and delivery of passengers?—No.

949. Mr. Moffatt.] Is not the landing at Madras exceedingly inconvenient?—It is a great bugbear, I think. There is difficulty at times, but it is merely for a very few days in the year that there is practically any difficulty. I hardly ever knew, during my own residence in Madras, of a passenger being carried on to Calcutta.

CHARLES SHAND, Esq., called in; and Examined.

954. Chairman.] You have also resided in India, at Madras, have you not?—Yes, for 20 years, but at Ceylon principally.

955. You have heard the evidence given by Mr. Nelson and Mr. Crake with respect to the postal services; do you agree with them in their opinion that the service as performed by the Peninsular and Oriental Company has been satisfactory to the public?—I see no improvement in 20 years; it is no faster now than it was 20 years ago. I do not know whether that would be considered an improvement or satisfactory; we see that the American postal service is expedited, and I do not see why it should not be expedited to India also. Generally there is no complaint as to the mode in which it is done.

956. It amounts to this, that you think that in these days we ought to have a higher rate of speed?—Decidedly.

957. The contract rate at the present time is 10 knots an hour, is it not?—Yes, but they can do it quicker.

958. Mr. Moffatt.] What is the contract rate with the American steamers?—I do not know, but it is very much higher; 12 knots, I think it is, but I do not know positively.

959. Chairman.] Have you had much experience in the use of the telegraph between this country and India?—A very large experience.

960. What is the result of that experience?—

That it has been most disgracefully performed ever since it commenced, and the loss has been very serious in every respect. I will read a few words from a letter which I have received which explains clearly the loss that people are put to, who have made use of the telegraphic communication. It is a letter dated the 6th of January from Madras, acknowledging the receipt of 24 telegrams, the time occupied by which was from 10 to 30 days; they were received most irregularly. In some cases the subsequent advices by post arrived before them. The letter states, "The list comprises the whole of the telegrams we have received from you since we last wrote, and the following is a list of those which we ought to have received, but have not,—Nos. 473, 475, 477, 479, 499, 501, 503, 509, and 523; possibly these will come dribbling in in the course of the next 0.43.

950. It is an open beach, is it not?—Yes, quite an open beach.

951. Mr. Ayrton.] Is there any loss to signify in goods being landed or shipped at Madras?—Not to signify.

952. How would you propose to carry on the communication further east when the lines of railway are completed in India?—I think that the postal line must be from Aden to Galle. What port the steamer that goes from Galle to China, and to the east, should start from, is another point. I should imagine that Bombay or Calcutta was the right point. Bombay probably for their first starting point.

953. Do you think that a steamer to go to China would first start from Bombay to carry on a further communication eastward?—Bombay would be the place of great resort, but those are matters more within the knowledge of a company like the Peninsular and Oriental Company than mine. It is not a point about which I can give much direct information.

10 days, but whether they come to hand at all or not is a matter of no moment now since the delay which has taken place in their transmission must have utterly defeated the object with which they were despatched; that your telegrams despatched on the 25th November should only reach us on the same date with others despatched more than a month after them is quite beyond our powers of comprehension. Redress is of course out of the question, but it is very hard to have to endure such treatment uncomplainingly. What mischief may have arisen from our apparent neglect of the many orders which would have been practicable had they come through within a reasonable time, or in their proper turn, we have yet to learn, but doubtless great dissatisfaction must have been caused generally amongst your friends whose interests have suffered from the unaccountable conduct of the telegraph officials, and who, till they receive an explanation will, we fear, lay the blame of the consequences at our door, and if they act hastily in the meantime may sever their connection with us."

961. Have you found any change lately for the better?—In the last six weeks there has been a very great improvement.

962. Can you attribute that to any cause?—It was a curious coincidence that it was contemporaneous with the motion that was made in the House of Commons.

963. But whatever the cause was the improvement has taken place?—Whatever the cause was it has taken place.

964. Do you receive your messages now with reasonable regularity?—I received three this morning in three days both from Ceylon and from Madras.

965. Were they correctly rendered?—They were correctly rendered, and that has been lately the case in every instance.

966. Have you formed any opinion as to whether the cause of dissatisfaction exists in India or on this side of India?—I think it is a good deal attributable to carelessness in India. I may mention that we have felt less inconvenience perhaps from the circumstance that all our telegrams are in cypher and in repetition at the same time; that is to say, we have one word re-

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presenting a sentence and it is accompanied by another word representing the same; so that either one word or the other reaches its destination.

967. Are they both sent at the same time?—They are both sent by the same telegram, but the cost, of course, is just double.

968. You have heard what the previous witnesses have said with regard to the great advantage of the power of sending information to India by the telegraph which exists now, do you agree with their evidence?—Yes, it has completely revolutionised the mode of carrying on trade.

969. And you think that the telegraph is essential to the proper conduct of trade in future?—It is absolutely essential.

970. In fact, you would not know what to do without the telegraph?—No; we should probably as easily know how to do without letters as without the telegraph.

971. Do you think that the telegraph is gradually superseding the post for all important purposes of commerce?—Yes.

972. Letters are becoming quite subsidiary and explanatory of the telegrams?—Yes; quite so. With regard to the subsidy to the Peninsular and Oriental Company, there is one point which I think has been lost sight of, and that is, that the loss is not so much as the gain to the English post office from the correspondence with India. For instance, we receive a telegram to-day and we send 20 telegrams out probably in consequence of it; in like manner the Indian postal communication increases the local postage.

973. Mr. Moffatt.] Are you always in the habit

of repeating through the post office what you have sent by telegraph?—Yes, always.

974. Are you in mercantile connection with China, or have you any knowledge of the commerce between India and China?—Not more than being in the East India trade. I have a general knowledge only.

975. Could you give the Committee any idea of the relative importance of the commerce of China and the commerce of India as regards England?—No; I cannot in figures.

976. Mr. Weguelin.] You stated that the local postage benefited very much by the transmission of the mails from India?—Yes, from the correspondence with India.

977. Do you think that the division of the expenses of the mail service between the Indian revenues and the English revenues, is fair upon India?—No.

978. You think that more ought to be borne by the English than by the Indian revenues?—Yes.

979. If the Indian post-office benefits by the great increase of the internal postal service, ought it not to bear an equal share in the expense?—I misapprehended your question; I wish to lead the Committee to understand, that I considered that the loss which the post-office put down to the subsidy is more nominal than real.

980. Do you think that India recoups herself for the half of the loss which she bears by the internal postal service?—No; England does.

981. But does not India also do the same?—Yes; but I was merely referring to England.

Friday, 20th April, 1866.

MEMBERS PRESENT:

Mr. Ayrton.
Sir Charles Bright.
Mr. Childers.
Mr. Crawford.
Mr. Laird.
Mr. Moffatt.

Lord Robert Montagu.
Sir Henry Rawlinson.
Mr. Schreiber.
Admiral Seymour.
Mr. Turner.
Mr. Weguelin.

ROBERT WYGRAM CRAWFORD, Esq., IN THE CHAIR.

PATRICK CAMPBELL, Esq., Examined.

982. *Chairman.*] I BELIEVE you are the sub-manager of the Oriental Bank Corporation?—Yes, in London.

983. Has that Corporation much occasion to use the telegraph to India?—Yes; very frequently.

984. How frequently, in general terms?—Nearly every day; sometimes two or three times a day; sometimes two or three days may elapse without; but we use it nearly every day.

985. Is your receipt of messages as frequent?—Yes, nearly. I think we send out rather more than we receive, but still we receive a good many.

986. Are there a good many branches of your bank in various parts of the world?—Yes.

987. Will you enumerate them?—We have branches in China, where I was a good many years manager, and we have branches in Japan, in India, in the presidency towns, and in Ceylon, Mauritius, and Australia.

988. Your telegraphic communications are with your establishments at Madras, Bombay, and Calcutta?—Yes, but our messages from Australia, Japan, and China come to Galle; last night we received a message from Hong Kong, dated the 1st of April.

989. Was that brought by ship to Galle?—Yes, brought by ship to Galle, and from Galle transmitted by telegraph.

990. Do you find the facility of communication by telegraph with your establishments in the East very advantageous?—No doubt it is.

991. Have you reason to be satisfied with the manner in which those messages of yours have been forwarded?—At first they were not at all forwarded well, and we were not satisfied with them; but lately they are very much improved. By first, I mean during the last twelve months. In October, November, and December we seldom got messages under 10, and generally 14 or 15 days from Bombay or Calcutta.

992. Were they in a good condition, or mutilated?—We telegraph in cypher, and they were mutilated sometimes; now they are very much better.

993. I suppose, as a matter of fact, your transactions are principally communicated to your agencies abroad by means of the telegraph?—Yes, we receive advices of all remittances and drafts upon us, and we know what is coming

forward in advance of the mails, and they know what bullion we are sending out.

994. Mr. *Weguelin.*] If an order for payment is advised by telegraph, do you pay upon that order simply?—Yes, we can do so if we wish; we do not like to do it, but we can do so if we wish.

995. *Chairman.*] The principal advantage to you is this, is it not, that you in London know what remittances you have to expect by the next mail?—Yes, by two mails very often; for instance, we know what drafts are upon us, and what remittances are coming forward.

996. Are you able to tell your agents, in like manner, what remittances you are making to them?—Yes, we tell them the amount of the drafts upon them, and the amount of bullion that we are sending out, and in fact, we inform them generally.

997. Then, in point of fact, your correspondence by the post is subsidiary to your telegraphic communications to a considerable degree?—Our telegraphic communications, of course, must be brief; we can give all the heads of information that we want to give, but of course it is shorter by telegraph than by letter.

998. As far as your communication is concerned, very important interests are dependent, are they not, upon the accuracy and promptitude with which the telegrams between the two countries are delivered?—No doubt.

999. You have, of course, a very large correspondence to maintain with India?—Very large.

1000. Are you satisfied with the extent to which the public convenience generally is consulted by the present arrangements?—We think that a weekly mail to Bombay would be a great advantage to us in the Indian correspondence particularly.

1001. Do you send the greater part of your correspondence to Calcutta and Madras even at the present time by way of Bombay?—We do.

1002. Then we may suppose that when the railways are open from Calcutta and Madras respectively, to Bombay, the whole of the correspondence of India, judging by your own experience, will be forwarded to Bombay?—I have no doubt of it.

1003. And practically that the separate service between Aden and Madras and Calcutta, will be wholly unnecessary, as far as time is concerned.

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in the transmission of postal communication?—I have no doubt of it; in fact I made a memorandum of the dates, which perhaps will be of service to the Committee. Our remittance of bills for instance, coming forward from Calcutta, leaves Calcutta on the 9th or 10th, and if the first of those bills are sent by Bombay, we get them generally a week, and sometimes more than a week earlier than if they came by Galle. In the same way in sending out, the mail that left yesterday, the 18th, will reach Calcutta *via* Bombay on the 15th of next month; the mail by Galle that left on the 10th only gets there on the 14th, one day before, so that actually there is seven days' saving by Bombay to Calcutta each way, and that will be reduced by-and-by when the railways are open.

1004. Practically the expenditure incurred in the maintenance of a direct communication between Aden and Madras and Calcutta is so much money thrown away?—I should think so, as far as sending letters goes.

1005. And when the railways are completed, no advantage will be lost by the withdrawal of the sea mail to Calcutta, with regard to bulky correspondence?—I think not.

1006. What day of the week do you think

would be most convenient for the dispatch of the mail from London?—I should think Friday.

1007. Friday is the day following the weekly meeting of the Directors of the Bank of England, is it not?—Yes.

1008. When the value of money for the ensuing week is generally regulated?—Undoubtedly; and the whole news of the week can be summarised on the Friday afternoon, Saturday being a half holiday.

1009. Saturday is, as you say, a half holiday generally, consequently when the mail leaves on Monday it takes no further additional mercantile news than it would have taken if it had left on Friday?—I think very little.

1010. Mr. *Wequelin*.] Did that telegram which you mention of the 1st of April come by the Persian Gulf?—It did; it was dated Galle, two o'clock, on the 17th, and was received at six last night.

1011. *Chairman*.] Would the Committee be justified in receiving the statements which you have made as indicating the general opinion on the part of the banking corporations in London generally connected with the East?—I presume so: their interests are identical with ours as regards communication.

ROBERT GLADSTONE, Esq., called in; and Examined.

R.
Gladstone,
Esq.

1012. *Chairman*.] WHAT is the name of the firm of which you are a member?—Ogilvy, Gillanders, & Co., of Liverpool, and Gillanders, Arbuthnot, & Co., of Calcutta.

1013. Your firm is extensively engaged in trade with the East, is it not?—With Calcutta.

1014. Have you any correspondence with Bombay?—Yes, we have a corresponding house there.

1015. And generally with India and the East?—Yes.

1016. Have you frequently occasion to make use of the telegraph to India?—Very frequently.

1017. And do you receive many telegrams from India?—At certain times we receive a very great number.

1018. Do you, as a matter of business, telegraph to India the result of every important operation in which you may be engaged?—Yes; and they also telegraph from Calcutta in the same way.

1019. I presume, at the present moment, you would make known to your friends in India the present state of things in Liverpool?—Yes.

1020. Your principal purchases of goods which you are sending out to India, or your sales of Indian produce that you have here belonging to your friends in India, would be telegraphed out?—Yes.

1021. What is your experience of the manner in which the telegraphic service to India has been carried on?—Our experience until lately has been that it was very imperfect, from a variety of causes, but at the present moment the service is working remarkably well.

1022. What was the time, speaking of five or six months ago, that your messages ordinarily took to reach you from Bombay?—About five or six months ago I should think it was about a week or 10 days on the average.

1023. Did they come in good condition generally?—No, at that time they did not; they came in very bad order indeed, some of them.

1024. You had, probably, considerable difficulty in decyphering the meaning of your friends?—A very great difficulty sometimes.

1025. So far then as accuracy is concerned you had not much reason to be satisfied with the service of the telegraph?—No, on some occasions we were very much dissatisfied.

1026. Have you ever been misled by a message?—Yes, once or twice.

1027. Have you known any instances of figures being changed?—We have sometimes had figures rendered to us in such a way that we could make no use of them, and on other occasions they were so rendered that it led to mistakes.

1028. You find now that the service is better conducted?—Yes; very much better conducted.

1029. Do you concur in the desirability of there being a weekly mail between this country and India?—Certainly.

1030. What day of the week would you select for the despatch of the mail?—Considering the interests both of London and of Liverpool, I think it is desirable that the mails should leave London every Friday night.

1031. Your Manchester markets are on Tuesday and Friday, are they not?—Yes.

1032. Therefore, you would be able by that mail to communicate by post to your friends in the East the particulars of the market of Friday?—Yes; we could telegraph to our London correspondents, who could write a letter about it.

1033. And your cotton market returns are made up every Friday morning, are they not?—Yes; every Friday morning.

1034. So that Friday would be the day of the week on which you would be able to communicate the latest intelligence to your correspondents abroad, upon all matters of interest to them?—Yes.

1035. You mean that the letters should be dispatched from London at the usual hour on Friday evening?—Yes; *via* Marseilles on Friday evening. They should be despatched from London on Friday, because I suppose that in any case the mail would leave London a certain number of hours after it left Liverpool. If it was to leave Liverpool late on Friday night, it would

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would put the London merchants to the inconvenience of having their mail day on Saturday, which is a thing that none of us like. It would, however, be preferable to have the mail dispatched from London early on Saturday morning, after the arrival in town of the mails from the provinces, thus enabling letters from the East to be posted all over the country up to Friday night.

1036. Mr. *Weguelin*.] It might happen, might it not, that it would not be convenient for a steamer to leave the port of Southampton in the night?—No; but I refer to the Marseilles mail, the mail that goes by Dover and Calais.

1037. *Chairman*.] The day or hour of the departure of the steamer from Southampton is perfectly a matter of indifference, is it not?—That is quite a matter of indifference.

1038. In fact you send next to nothing of your correspondence that way?—Only heavy things. We send overland samples and things of that kind by the Southampton steamer.

1039. Do you find, as a matter of experience now, that you get your advices from Calcutta and Madras as rapidly by the direct communication as when they are sent from Bombay?—As a rule we have no regular communications from Madras; our chief messages are only from Calcutta. I am personally concerned only in a Calcutta house. I have nothing to do with Madras, I mean as regards my personal experience. We find very little difference in the time that a message takes. For instance, we sometimes receive a message from Bombay and a message from Calcutta on the same day, and the time of leaving is sometimes just a difference of an hour or two.

1040. My question had reference to the postal service?—All our letters of any importance come by Bombay. For instance, it very frequently happens that the mail from Calcutta leaves for Bombay overland for England and by the steamer which will sail on the same day, and in those cases, of course, we never write any important letters by the steamer mail, because they are delivered a week after the letters that go by Bombay.

1041. Do you think that the mercantile community in Liverpool generally concur in the evidence that you have given?—I think so. I have spoken to a great many friends there about it, and they all hold the same opinion.

1042. Lord *Robert Montagu*.] You stated that until lately the telegraphic service was bad from a variety of causes; are you in a position to state what those causes were?—What I meant by saying a variety of causes was this; first of all, owing to the great delay in the transmission of the messages, we have had some messages that took a month to go out, and we had one case of a message which was delivered in Calcutta four days after the letter confirming it was delivered which was written on the same day, so that that telegram was of no possible use to us there. Then some of the messages have been delivered in such a form that we could not really understand what they meant, from the spelling of the words being so imperfect, owing to the employment of foreign clerks, who do not understand English, and who guess at the words.

1043. But you say that it has improved within the last few months?—Very much so. Since the debate upon the subject in the House of Commons we have noticed a very marked improvement. Whether it is owing to that cause or not I cannot tell, but the fact is so.

1044. Where do you consider that the fault did originally arise, in England or abroad?—Abroad, certainly.

1045. Do you think that the debate in the House has altered the state of affairs abroad as regards the telegraph?—I believe that representations have been made in a certain quarter which have led to attention being paid to the matter on the Continent.

1046. And the service is now better conducted throughout, both abroad and in England?—I do not know that it is better in England, because we never had occasion to find fault with it in this country; but our messages take only two or three days now on the average.

1047. When is the Manchester market over on Friday?—About four o'clock in the afternoon.

1048. Then in order to take advantage of the intelligence which you have derived at the market and to send messages after the market was over, the mail would have to leave after four o'clock?—My partner, Mr. Murray Gladstone, who is at the head of the firm, and manages the Manchester business, is at present in the room, and he could answer any question about Manchester that the Committee might wish to ask.

1049. In order to take advantage of the mail, so far as the close of the market is concerned, the mail could not leave Manchester till after four o'clock, could it?—No, I should think not; but they could telegraph the Manchester advices in time to catch the mail in London.

1050. Mr. *Turner*.] You stated that about a week or 10 days was the time that a telegram usually took last December?—Yes, about that time.

1051. As it is very much better now, what is the average?—We reckon about two or three days now for a message; that is to say, speaking of the last month or six weeks, our messages have come through in about that time.

1052. And much more accurately?—Much more so.

1053. What is the time the post takes between Bombay and Calcutta overland?—It depends upon the season of the year; in the rainy season our mails are sometimes very much delayed, but it would take about four or five days, I should think, on the average.

1054. If you had a message to send to Calcutta from Liverpool or from London, which you wished to arrive as quickly as possible, you would provide for that by writing to your correspondents at Bombay, and they would send a telegram to Calcutta?—No, we should prefer telegraphing to Calcutta, direct from Liverpool; we always do so.

1055. Mr. *Weguelin*.] Do you make use of the Post Office for the transmission of samples and small parcels?—Yes, of the Overland Mail by Southampton.

1056. Previous to the regulations in that respect you used to send them by sailing vessel?—Yes, they went by sailing vessels round the Cape, or as "freight" by the Peninsular and Oriental steamers.

1057. Mr. *Turner*.] As a matter of practice, as far as postage is concerned, do you think it would be the better plan for the post to have as rapid a communication as possible by steamer to Bombay, and then that letters to other parts of India should be distributed from Bombay?—I think that the mails for India ought to go to Bombay, and be distributed from Bombay for every part of India.

GILBERT M' MICKING, Esq., called in; and Examined.

G.
M' Micking,
Esq.

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1058. *Chairman.*] WHAT is the name of the firm in Liverpool to which you belong?—Ker, Bolton, & Co., Liverpool.

1059. Are you largely engaged in the Eastern trade?—Yes, we have three firms in the eastern Archipelago.

1060. Do you use the telegraph much?—Yes, constantly.

1061. Are you satisfied with the manner in which the service is conducted?—By no means. To prove that to the Committee, I have a number of our messages copied out as transmitted and also as received, and I have marked in red certain words showing where mistakes have occurred, which perhaps the Committee might wish to look at (*handing a paper to the Chairman*).

1062. Have you at any time sustained any inconvenience from the incorrect rendering of the messages?—Very great indeed, from the inaccuracy with which they have been rendered.

1063. Have the figures been wrongly represented?—Yes, we have been put to great inconvenience from the words being inaccurately transmitted, and misleading us.

1064. What is your present experience?—It is better lately, but I see no reason why it should not be perfect.

1065. You get your messages in less time, do you not?—They come in less time, and with greater general accuracy, but still there are frequent mistakes.

1066. Do you regard this facility of communicating with your correspondents abroad as of much importance to you?—It is essential; I look upon the telegraph system with the East as superseding the mails to a great extent; it has become perfectly essential, in fact.

1067. Probably like other persons your correspondence by mails is principally the extension or amplification of your advices by the telegraph?—It is so; we repeat our messages, and write rather more fully about them, but we conduct our business to a very great extent by means of the wire.

1068. You find, I dare say, that one use of the telegraph is, that it saves loss, and at the same time it enables you to make profits?—It renders business much more safe, and enables you to keep your foreign houses better informed, and more under control.

1069. And as the general result of all that, probably the public get a benefit from it?—Unquestionably they do.

1070. They get their goods cheaper?—Yes, they get their goods cheaper and their produce cheaper.

1071. And the risk which you sustain as a merchant is diminished?—Very much diminished, and our business is increased by it, I think; our operations can be repeated much more frequently.

1072. That is to say, you can turn over more business with the same amount of capital?—Yes, the wheel is always going round when you use the wire in place of waiting for the mail for advices.

1073. What would be the feeling if from any circumstance the communication with India by telegraph were now cut off?—I cannot contemplate such a serious calamity to merchants.

1074. Would it not be a source of satisfaction

to you if some alternative method of communicating with India was established?—I have, of course, an idea of my own upon the subject; I think that the Government should conduct it as they do the Post Office, charging the public for the use of it.

1075. *Mr. Childers.*] Do you mean that they should conduct the telegraphic service everywhere?—No; I think that to the East it should be conducted as the Post Office is.

1076. *Chairman.*] Have you ever had occasion to make complaints of inaccuracies?—Yes, I always tell a clerk to write and send a complaint when we receive a message incorrectly, or any great delay takes place, and we receive a stereotyped reply.

1077. In the event of any possible loss being sustained by default on the part of the telegraph companies, are you able to put your finger upon the quarter whence your recompense is to come?—I should make them pay if I could, but I believe we cannot do so.

1078. Probably you think, that if the Government had it entirely in their own hands, and were solely responsible, you would be able to enforce a claim upon them?—I think that some of the gentlemen whom I see here might then be down upon them, and try to make them conduct the service better than they do.

1079. In your opinion, would Friday be a convenient day for despatching the mail to India?—I think it would be a very great convenience to merchants, in Liverpool particularly. All weekly figures and statistics are, by the brokers, made up for the Friday, and those could be communicated.

1080. You mean, that the mail should leave London on Friday evening?—Yes, I think that the mail should leave London on the Friday evening, leaving Liverpool on the Thursday evening or the Friday morning, or better still if despatched from London early on Saturday morning, after the arrival in town of the mails from the provinces, it would permit of letters for the East being posted all over the country on Friday evening.

1081. But you would be unable then to communicate with your correspondents abroad through your London friends?—We might come up to London, and have another mail-day in London.

1082. *Mr. Childers.*] You stated that you thought that the telegraphic communication to the East should be in the hands of the Government; is it your experience that the Government is well suited to conduct business of that kind?—I think that they conduct the Post Office business, as a whole, satisfactorily.

1083. If you base your opinion that the Government should conduct the telegraphic business upon the circumstance that they conduct the Post Office, would not that equally apply to our home telegraphic system?—No.

1084. Does not the Government conduct its home post satisfactorily?—Yes; but our home telegraph system is perfect, or nearly so, and I am quite satisfied with it, but not with the foreign telegraphic system.

1085. Do you think that the rates which are paid for telegraphic messages in England are satisfactory?—Yes, quite so.

1086. Do

1086. Do you think it satisfactory that in the case of two towns within 20 miles of each other, the charge in the one case should be 3s. and in the other 1s., for a message to London?—My messages are generally from Liverpool to London, Glasgow or Manchester. I do not know the local rates.

1087. You speak as to the satisfactory condition of the home telegraph between London, Liverpool, and Manchester?—Yes.

1088. But you express no opinion as to whether the telegraphic system at home generally is satisfactory?—No.

1089. You would wish that between London, Liverpool, and Manchester it should be in the hands of companies, but that, as between London and the East, it should be in the hands of the Government?—Precisely so.

1090. Have you ever considered what establishment that would involve on the part of the Government?—No, I have not.

1091. It is your impression that public establishments abroad are things which may be satisfactorily left to the surveillance of the Government?—I think so; I think that if it were in the hands of the Government we should then have a remedy, whereas as it is conducted now it appears that we have none.

1092. Sir Charles Bright.] You stated that you think that the Government should conduct the telegraphs to the East, because they are at present worked badly. Are you aware that all the telegraphs in India are at present worked by the Government?—I do not speak of those in India.

1093. But is not the telegraph in India, as well as in the Persian Gulf, worked by the Government of India?—I am talking of the line from London to the East, not of the internal telegraphs in India; I know nothing about them.

1094. But are you not aware that all telegraphs from Calais to Constantinople and thence to the head of the Persian Gulf, and thence to Calcutta, are in the hands of the different governments and not in the hands of any private administration?—I was not aware of that.

1095. Lord Robert Montagu.] Do you mean that the English Government should take the entire line of telegraphic communication to India, and conduct it?—Yes.

1096. Can you offer any suggestion as to the way in which that could be done?—By arrangement with foreign powers.

1097. Do you mean that there should be one wire devoted to the use of the English Government?—I am not prepared to go into the detail as to how it could be done, but my suggestion has reference to the great advantage that it would be, provided it were practicable.

1098. Sir Henry Rawlinson.] Are you aware that the telegraph to India, from the head of the Persian Gulf, is directly in the hands of the Government at present?—I was not aware of the entire line being so.

1099. You are not aware, then, that the line from India to the head of the Persian Gulf is in the hands of the British Government at present; that from thence to the Turkish frontier to Belgrade, it is in the hands of the Turkish Government; and from Belgrade to London it is worked by the Austro-Germanic Union?—I am not aware of the exact details, but if it could be arranged that in place of its being in the hands of three powers, it could be in the hands of one, it would be an advantage.

1100. Mr. Childers.] Do you think that fo-

reign Governments would allow the English Government to have that advantage?—I offer no opinion upon that; I say that, provided it could be arranged, it would be an advantage.

1101. Mr. Turner.] At what places in the East have you houses of business?—We have a firm in Singapore, another in Manilla, and another at Batavia.

1102. Beyond what you have mentioned, have you any particular measure which you would suggest for the improvement of the telegraphic communication between England and the East?—No, the solution of the difficulty, it seems to me, would be, if the Government would take it in their hands as they do the Indian Postal Service.

1103. When you have made the complaints of which you have spoken, of the constant inaccuracy, and the undue delay in the transmission of your telegrams, have you ever obtained any substantial redress?—No substantial redress; there is a civil answer, and that is all.

1104. Are the Committee to understand that if the telegraphic communication were in the hands of the different European Governments, the representations of the English Government would, in your opinion, have more weight with the foreign Governments than with a private company?—Yes, I think so.

1105. And that therefore you would have a better means of obtaining redress and insuring accuracy and proper speed than you would under the present system, one part being in the hands of a private company, and the other part being in the hands of foreign Governments?—Precisely so.

1106. Mr. Childers.] The telegraph system in France is in the hands of the Government, is it not?—I believe so.

1107. Consequently, messages going from France to the East are pretty much in the position in which you would wish messages going from England to the East to be; that is to say, the message is taken by the French Government, and the French Government look to its going on properly?—That may be so. I am not able to state that it is.

1108. Have you any reason to believe that French people are more satisfied with their distant messages than English people are?—I know nothing about that.

1109. Mr. Weguelin.] Would it be an advantage to your business to have the telegraph line continued to Singapore?—A very great advantage, indeed.

1110. Singapore would be a very good point for the China trade, to a certain extent, would it not?—Yes; and for all eastern trade. It seems like the centre of a wheel, whence branches go off in every direction.

1111. The telegraph goes now as far as Rangoon, does it not?—Yes; and I should continue it down the coast to Singapore.

1112. You think that that would be very desirable, considering the importance of the trade with China, Singapore, and the Dutch Settlements?—Yes, very much so. Our messages at present are transmitted by steam to Galle, and they are put upon the wires there.

1113. What difference of time would it make if the telegraph were extended to Singapore?—I should think it would save us a week; in fact, the saving would be the difference in the time occupied by the steamer from Singapore to Galle, which I think is about a week or eight days.

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CHARLES JAMES ROBINSON, Esq., called in; and Examined.

C. J.
Robinson,
Esq.

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1114. *Chairman.*] ARE you engaged in business in Liverpool?—Yes.

1115. What is the name of your firm?—Robinson Brothers.

1116. You have heard the evidence given by the last two witnesses from your town, do you generally concur in what they have stated?—I do.

1117. Do you use the telegraph extensively in your business?—Yes.

1118. Is it your practice to inform your correspondents abroad by means of the telegraph of every sale or purchase on their account of any consequence?—Yes.

1119. Do you think that great certainty is introduced into your business by that method of communication?—Yes.

1120. In your opinion, would Friday be a convenient day as regards Liverpool, for the making up of the mail for India?—I do not think it would. I certainly should like to have a certain day of the week for the mail to go, but as all the weekly lists are made up on Friday in Liverpool, except by telegraphing to London, we could not advise the particulars of stocks, and that sort of thing. If you have an agent in London it would be a suitable day, but for firms that have not branches in London, I do not think it would be at all a convenient day.

1121. At what hour in the day are your cotton statistics for the week made up?—They are very seldom out before 11 o'clock in the morning on Friday.

1122. Would there be plenty of time if there were an afternoon mail for them to be dispatched from Liverpool by that mail?—Yes, certainly.

1123. Do you think, generally speaking, that the establishment of a weekly mail would be a great advantage to those engaged in the eastern trade?—Yes, certainly.

1124. Have you any evidence to offer to the Committee with regard to the messages which you have been receiving from, and forwarding to, India?—My complaint is more on account of the irregularity of the service, and I have brought with me a few papers showing the time that has been taken in transmitting messages. Some messages have not been delivered at all. They are all specified in this memorandum; some relating to Madras, and others to Bombay, and I have made them up to the 31st of December.

1125. Speaking of the latter end of last year, were your messages then forwarded satisfactorily?—No, certainly not; very badly.

1126. Upon the average, how many days did they take?—I have not made up the average, but there are some shown on the paper which took 33 days, and they were a great deal longer in arriving than the letters. We sent telegraphs, but the letters arrived there first, and in some instances, messages were never delivered at all, and we got no satisfaction whatever. I wrote a letter complaining, and I got a letter from the telegraph company asking me for my evidence. I gave them the evidence, and they said that they would put it forward, but I have never heard from them from that day to this.

1127. Since the early part of this year, has there been any improvement, in your experience?—There has been some improvement lately, but I think that is owing to the motion in the House

of Commons as much as to anything, and to fewer telegraphs going.

1128. Is it the general opinion of Liverpool that the mere mention of the subject in the House of Commons and the appointment of this Committee has led to good?—I think it is; it certainly appears so, and I take it also from the newspaper reports from India; the intelligence was telegraphed out.

1129. *Sir Charles Bright.*] When you state that you think that the discussion in the House has led to a great improvement, do you know that the telegraph line to the East is generally worked very much worse during the winter, from the effect of the weather?—No, I have not noticed that. My general complaint has been in May and June.

1130. One of the witnesses stated that in October, November, and December, messages were 10 days in arriving; I wish to know whether that is your experience also?—I cannot give the average.

1131. *Lord Robert Montagu.*] Did you say that it would suit you better in Liverpool if the mail left on Saturday morning?—No; I would sooner that it left London on Friday night if the mail could be dispatched from Liverpool at 12 o'clock on Friday; but not earlier than 12 o'clock.

1132. What objection would there be to Saturday?—We like to get closed early on Saturday; it is a half-holiday everywhere nearly.

1133. *Mr. Moffatt.*] The memorandum of the telegraphs which you have given in, only appears to bring them down to the 17th of December. Can you furnish the Committee with any later memorandum of the time occupied in the transmission of messages by the telegraph wires to Bombay?—I have had some very quick messages in February. On the 25th of November we sent two messages which did not get to hand till the 31st of December, 36 days. On the 5th of December we sent one, which has never arrived out yet.

1134. What has been your experience in the months of January, February, and March?—In February, a message, dated Bombay, the 6th of February, reached our office the next morning, and one dated the 5th, reached our office the next morning.

1135. And in March has the improvement continued in somewhat the same ratio?—Yes, I think it has. Those have been the quickest telegraphs that we have had.

1136. So that the telegraph administration has recently been conducted to your satisfaction?—Yes, it is more satisfactory.

1137. You have expressed a desire, that for the commerce of the country there should be weekly mails. Can you give the Committee any information as to the probable increase in the amount of correspondence which would arise from weekly mails?—It is difficult to form an idea of it.

1138. Have you formed any estimate of the increased cost which would be incurred from having weekly communications?—No; but I think the telegraph system causes a great deal more letters and postal communication in this country, so that that should be put against any increased cost. A telegram coming from India causes

causes probably five or six or more letters to be dispatched about the country, so that it increases the postal communication infinitely.

1139. But as regards the question, as between a weekly and a fortnightly communication, if your telegraph service is very good and not very expensive, does not that rather obviate the necessity for a more frequent postal communication?—No, I do not see that it does.

1140. If you get your messages and communications with regard to your various contracts, both in buying and selling rapidly and accurately through the telegraph, you merely record and confirm the events of the past, by the postal communication?—Yes, you confirm them; but it is more satisfactory to confirm them more frequently.

1141. You are unable to give the Committee any estimate as to the increased cost that might

accrue from putting on mails weekly instead of fortnightly, or of the probable increase in the number of letters?—No; I could not do that.

1142. Mr. *Wequelin*.] Do you think that there would be any advantage in having a wire reserved for mercantile messages?—Yes, I think so; there should be a double line certainly; that would be the best thing that could be done, I should think.

1143. If that could be carried out generally for mercantile messages, it would be a very great advantage?—Yes; either to have a wire kept separately, or to have a double line for general purposes.

1144. Just now, messages are very often delayed, are they not, by the accumulation of local and trifling messages at different points?—I imagine so.

JOHN GREEN, Esq., was called in; and Examined.

1145. *Chairman*.] You represent the firm of Ralli Brothers?—Yes; in London, Liverpool, and Manchester.

1146. Have you extensive transactions in business with most parts of the world?—We have, but more particularly with India, with Calcutta, Bombay, and Kurrachee.

1147. Do you use the telegraph very much in your business?—Very much; in fact it is almost the sole medium of carrying on that business.

1148. Do you telegraph very frequently?—On an average, I should say, three or four times a week, either to one place or the other.

1149. The amount that you pay for your telegrams is a matter of indifference to you, I presume?—Yes, provided we get them correctly transmitted.

1150. In fact facility of communicating direct with your correspondents is of so much importance, that whether you pay 5 *l.* for a message, or 20 *l.* for a message, is not of very material consequence to you in the extent of your business?—No, as a rule it is not. Of course when you are telegraphing three or four times a week, it is an object to keep your expense down as much as possible, but a matter of 5 *l.* for a message is trifling, when compared with the transactions to which that message refers.

1151. That is to say, for an expense of 5 *l.* you may perhaps make a very great profit, or you may avert a great loss?—Yes.

1152. Probably your experience has led you to that conclusion in both directions?—Yes, most certainly; it enables you to prevent loss, because by means of telegraphic communication you are enabled to keep your stocks of goods down within a moderate compass, and, by the facilities of telegraphing purchases from here to India, and telegraphing back the sale of goods for shipment, the matter is simply reduced to the risk as to the solvency of your buyer.

1153. Your postal correspondence is probably little more than a *resumé* of your telegraphic communications?—Yes, it is a *resumé* of our telegraphic communications, with just simply matters of detail.

1154. The only difference being that you cannot send documents by telegraph?—That is the only difference, because the instructions which you give by telegraph are carried out, and the

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matter is done with over and over again, perhaps, before the letter reaches its destination.

1155. In your experience, is the telegraphic service to India satisfactorily performed?—It was anything but so for some time; during the last three or four months, perhaps, it has been better; but for 12 months it was very bad. I have brought with me a number of instances which I can refer to. For instance, on the 17th of March last year we sent to Kurachee a message worded in this way: "Linseed lower; Calcutta, 55 s. 6 d." that being the value. "Rape seed, 52 s.; sold 400 tons. Poppy seed, 48 s. 6 d. If saltpetre shipments large, buy 27 only." That message was transmitted, "Linseed lower; Calcutta, 55 s. 6 d.;" then the parts referring to rape seed and poppy seed were entirely omitted; and at the end it was, "If saltpetre shipments, buy large 27"; so that that completely altered the sense of the message, and instructed them to buy saltpetre largely, whereas it was an instruction to buy at such a price only, if the shipments were large; and the quotations for seeds were entirely left out. On the 20th of June we telegraphed them "to buy linseed for 56 s., rape seed and poppy seed, 53 s.; saltpetre declining." They telegraphed, "Buy linseed, 53 s.," leaving out rape seed and poppy seed altogether; and put "saltpetre advancing."

1156. Lord Robert Montagu.) Were those mistakes made purposely?—It is very difficult to say whether they were made purposely, but from the fact of the mistakes suiting most closely to the position of certain markets in Calcutta, the inference is that those mistakes were made on purpose.

1157. Mr. *Moffatt*.] Did you attempt to trace out where the mistake originated?—No; it would take a great amount of time, and very likely it would lead to no result, because persons who have had any experience in India know what tracing things of that kind means, especially where native clerks are employed.

1158. Lord Robert Montagu.] Then you consider that it was a fraud committed in India?—At all events it has the appearance of having been done purposely, but whether it is actual fraud I do not know. I have another instance that I can mention; we telegraphed, on the 24th of June: "Buy linseed 59 s., rape seed, 53 s., poppy seed, 53 s.;" they telegraphed it, "Buy

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"Buy linseed, 57 s.," reducing the item by 2 s., "rape seed, 55 s., poppy seed, 55 s.," increasing the item 2 s. in each case. It is strange that they should increase the price of those two articles by 2 s., and reduce the price of linseed; but that is the fact.

1159. Sir *Henry Rawlinson*.] The 3 might have been mistaken for a 5, might it not, being somewhat similar?—It might have been mistaken, it being telegraphed in figures.

1160. *Chairman*.] Did you give your messages in in writing or in figures?—In figures generally.

1161. Mr. *Moffatt*.] What is the difference of cost?—The Telegraph Company take five figures for one word, so that you can transmit a sale or purchase of goods in five figures, by simply coming to an understanding with your firm on the other side.

1162. Sir *Charles Bright*.] If it was a fraud it must have taken place in India, must it not?—The inference is it can only have taken place in India, because the Foreign Governments would have no object in doing so.

1163. Mr. *Moffatt*.] If other parties thought it worth their while to have an agent employed in the Turkish administration could not the mistake occur there?—It might have occurred, of course; it could have occurred that way.

1164. Lord *Robert Montagu*.] You stated that it was done to suit the Calcutta market?—I say the fact existed that the alteration in price suited the Calcutta market; I did not say that it was done for that purpose, but it was an extraordinary coincidence.

1165. Sir *Charles Bright*.] Is it within your knowledge that there have been cases of fraud in messages in India, especially with regard to opium?—I have heard of a case with regard to opium, in which I was informed by a gentleman who came from India that the fraud was directly traced to bribery on the part of some of the officials. It is almost needless to go on with these cases; but I think I have before me 50 similar instances. Here is one, where we advised our Calcutta firm of a remittance of 80,000 l., and they telegraphed it 8,000 l. On the 7th of June our message was, "We remit 80,000 l.; silks rising": the message as transmitted was, "We remit 8,000 l. since rising. Again, on the 14th of June we transmitted a message advising a sale of 6,000 bales of jute and 1,100 tons of linseed; the jute was put 600, and the linseed was left out altogether. In one case we advised a sale of 5,000 bales of jute, and they left it out altogether. And so it goes on; it is only multiplying instances. That went on until about September or October last year, when we found that those mistakes were entailing such very serious losses that it became a matter of thought whether we could not devise some means to alter the mode of telegraphing, so as to avoid the mistakes, and we have since substituted a code of our own, in which we entirely avoid the use of figures, using simply words, and I do not suppose we have had half-a-dozen instances in which the thing has been not absolutely unintelligible, but in which it has been doubtful.

1166. Lord *Robert Montagu*.] Did you institute that code of signals with the object of preventing the Telegraph Company from understanding your message, and thus obviating the possibility of alterations being made in it?—Yes; we invented it principally with the object of preventing our messages and their contents being

divulged to other people, and our messages being altered to suit the position of the markets, and with a view to prevent the losses that had arisen from that cause.

1167. *Chairman*.] Have you any remarks to make with regard to the time occupied in the transmission of messages?—I have not gone so particularly into that question; but we have had instances in which several messages have not been delivered; but that has been declared to have arisen from accidents to the line, and so on. There is no doubt that six months ago it was working much less efficiently than it is now; but even now some unaccountable delays do occasionally take place; our Manchester firm, having had occasion to complain on this point, writes us as follows: "As illustrating these irregularities we may instance a Calcutta message, which was dispatched by our firm there at 11.15 a.m. on the 1st March last, was not delivered at Manchester till the 11th March; whilst a message sent to us from Calcutta on 8th March was delivered to us at Manchester only an hour or so after the message of the 1st March. In respect to this message of 1st March we had the more reason to be annoyed, as most of our competitors had been receiving telegrams of several days' later date before ours of 1st was delivered, and it seems evident to us that, in this case at least, messages were not transmitted in the order of receipt. We strongly urge that this point be prominently brought under the notice of the Committee appointed by the House of Commons since, if no regard is paid to the priority of dispatch, the information conveyed by delayed telegrams would be perfectly useless."

1168. Have you business relations with other parts of the world?—Marseilles, Constantinople, and Persia; with Odessa we have not so much to do now; we have given up that part of the business.

1169. Do you use the telegraphs with those places as much as you do relatively with India?—Hardly so much now; before this year we did more so; there was never a day, perhaps, that we did not send a telegram either to Russia, Marseilles, Constantinople, or somewhere else.

1170. But whether to Turkey or India or any other place you find the telegraph a necessary means of communication at the present day?—It is absolutely necessary.

1171. Why did you discontinue sending messages to Marseilles or to Russia?—In the case of Russia, because we have given up our correspondence with that country.

1172. Supposing that, in consequence of the present complications on the continent, or a disturbance in Turkey, or from any other cause, your communication by telegraph with India was cut off, should you look upon that as a very great inconvenience to the management of your business?—Most certainly so; in fact, it would completely put a stop to all business until we could get ourselves into communication with the firm in India by carrying on a correspondence on the other route through Suez and Alexandria.

1173. Do not you think it would be desirable to establish, if possible, some alternative mode of communication by telegraph with India?—It would undoubtedly be desirable.

1174. Do you think it is possible to make a communication by way of Egypt, and along the south coast of Arabia to India?—I have not heard of that exact route; I have heard that there

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there has been some talk of carrying it on from Suez to Aden and that way; but I do not know the exact route it would take.

1175. Would you be glad to hear that such a plan had succeeded?—I should be glad to hear that a duplicate line existed; it would not matter what route it took, so that we got it.

1176. Would not that be desirable for the sake of security?—Yes, and also it would prevent delays, because it would lessen the traffic over the existing line, consequently you would get your message more rapidly transmitted.

1177. Have you anything to say with regard to the postal communication with India?—No, the postal communication is a matter of such secondary importance, that whether you have a mail a-week, or four mails a-month, it does not matter. The only inconvenience attaching to the present system is that sometimes the mail day falls on the Monday, and Monday being one of the busiest days in the week, after the half-holiday of Saturday and the Sunday, it is rather an inconvenient day.

1178. I presume, speaking of your London businesses, that you would concur with other witnesses in thinking Friday a convenient day?—Yes, I think Friday would be as convenient a day as any.

1179. It is one of the market days of Mincing-lane?—Yes, it is the closing day of the week for mercantile operations in London, and in the same way at Manchester; but it is impossible for a man to write all his letters after the close of the market on Friday; they would never get done; so that if you make Friday the day, your information is only up to the Thursday night.

1180. Mr. Childers.] You have spoken of numerous mistakes and delays in the Indian telegrams; what remedy could you suggest, or have you any other remedy except the hope of an alternative line in competition?—It appears to me that concentration is wanted, and some means by which you may bring about an understanding that a line should be devoted to the Indian telegraphic service through, from London to the head of the Persian Gulf.

1181. Do you think that if the Companies made that their object, a great improvement could be effected without any direct Government intervention?—I think so.

1182. You do not wish to see the telegraphic system to India more in the hands of the English Government than it is now?—No; my own opinion is, that things of that kind are best left to private enterprise. If you could only get the Telegraph Company to agree with the continental authorities to allow them to put up one or more wires through their states, you would then get a direct line of communication through, and you would not have the delays which now take place owing to the occupation of the continental lines by the transmission of Government or local messages.

1183. You think that private enterprise carries on business of this sort better than a Government Department?—I should think so; it is simply a matter of making the most money out of it; and the more efficient they make the communication, the more money they will make by it.

1184. Do you remember the complaints which two years ago were very rife in England, as to the manner in which our internal messages were transmitted?—I have no very distinct remembrance of them. I do remember something of the kind taking place.

1185. There was a time, was there not, when

the "Times" was full of letters as to the mistakes in the telegrams between different towns in England?—Yes.

1186. That is pretty well now at an end?—Yes; as regards English messages, you get them transmitted almost as perfectly as they can be.

1187. That has been done, has it not, without any intervention on the part of the Government?—So far as I know, I have never heard of any movement having been taken by the Government in the matter.

1188. You are aware that from India, up to the head of the Persian Gulf, the telegraph is in the hands of the Government?—Yes.

1189. Have you any reason to believe that in point of delay the management by the Indian Government has been at all remiss?—I am hardly prepared to say much upon that point. I know that occasionally our Kurrachee firm have written to say that they have found delays occurring in the transmission of their messages to and from Calcutta, Bombay, and Kurrachee; but I think that that must have arisen from circumstances over which they had no control.

1190. Has there been any disinclination, on the part of the Indian Government, to inquire into the matter and to give satisfaction?—No, I have not heard of any; we have not complained of anything particular to the Indian Government. The complaint has been more especially made from this side.

1191. Your correspondents in India, I think you stated, have had reason to complain?—Yes, but they have merely made the complaint unofficially; for instance, our manager has spoken to the manager of the telegraph, or something of that kind; it has not been the subject of any correspondence.

1192. You have read, I dare say, the complaints in the Indian newspapers, about the administration of the internal telegraph system?—Yes.

1193. Have you reason to believe that that has been amended latterly?—Yes, I think so; I think that the maladministration arose more from the inexperience of the staff, and from the great pressure of business that was thrown upon them when the telegraph was opened.

1194. Did you ever send a message to India through Russia?—I cannot say that we have given instructions for them to be sent that way, but we know that some of our messages were sent through Russia.

1195. Were those among the messages of which you have spoken to-day?—They have never arrived at all; our experience of the Russian line is anything but favourable. There was a breakdown somewhere or other in the Turkish line, and the Telegraph Company said, "This message we can send through Russia; will you give us instructions?" but we said, "No, send it whichever way you think proper; that is not our business; if you say that your line is broken we cannot insist upon your sending the message; but, as regards definite instructions, we do not consider that our province."

1196. Sir Charles Bright.] You stated, that you used to send messages to Odessa and Marseilles, and other places on the Continent; did you ever have any cause of suspicion of fraud at all with regard to any messages to those places?—None, that I remember.

1197. Have you ever had any suspicion of fraud on the English lines?—No.

1198. But only with reference to messages distributed

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distributed in India?—Only with reference to messages distributed in India; and we do not find mistakes in our homeward messages anything like so frequent or so important as they have been in the outward ones.

1199. Do you send messages to Kurrachee, as well as to Calcutta?—Yes.

1200. Do you find a great difference in the time of delivery, between Kurrachee and Calcutta?—No, I do not think there would be very much difference in that respect.

1201. Or between Kurrachee and Bombay?—No; and then those differences have invariably been traced to some accident, through a storm or something of that kind; I think that the average time of transmission of a message through India from Kurrachee to Bombay or Calcutta, would be a day's difference between the one place and the other.

1202. The time occupied in sending a message from Kurrachee to Bombay, is about a day?—Yes.

1203. That is a distance of about 500 miles, is it not?—I cannot speak as to the distance.

1204. Should you think a message from London to Glasgow very badly transmitted, if it took a day in your ordinary business in this country?—It ought to go within an hour, I should think, certainly within two hours.

1205. Therefore you would infer that the telegraphic service between Kurrachee and Bombay is not as good as it should be?—I should think that it is not adequate to the traffic which is thrown upon it.

1206. If you could get a through line to India in English hands, and you could get messages delivered backwards and forwards regularly within two hours each way, should you consider it a very great improvement in the service?—Very great indeed; a communication of that kind is hardly, as far as I can see, necessary: we should be very well satisfied if we could depend upon getting a message from any part of India in a day; we have very few instances of that kind.

1207. If anybody told you that it was possible that a message might be delivered there accurately in no greater time than two hours, should you consider it a thing very much to be desired?—Certainly.

1208. Lord *Robert Montagu*.] The remedy, if I understand rightly, which your experience would lead you to suggest is, that a private company should obtain two wires all the way from London to Bussora, at the head of the Persian Gulf?—Either two wires or two series of wires.

1209. Though they go through foreign states, you think those wires should be in the hands of an English company alone?—If not absolutely in their hands that there should be an understanding that they were to be under their control, and not to be interfered with at all.

1210. Mr. *Moffat*.] You have stated that the telegraphic communication was exceedingly inaccurate last year; have you found any improvement in the present year?—I have found very great improvement during the last three or four months, especially during last month. Lately we have been sending a message from England and receiving a reply within five to eight days.

1211. From what point to what point?—From Manchester to Bombay, and Manchester to Cal-

cutta, or London to Bombay and London to Calcutta.

1212. Are the instances of inaccuracies which you have given in principally existing as between Bombay and Lancashire?—No, those were all between London and Kurrachee and London and Calcutta. I thought that those were sufficient without going down to Manchester for further instances.

1213. Sir *Henry Rawlinson*.] There are two telegraph companies in England, are there not, employed in the transmission of messages to India?—Yes.

1214. Which do you usually employ?—We employ the Electric and International.

1215. And in giving your messages you do not state yourselves which line you prefer?—No.

1216. You leave that entirely to their discretion?—Yes, certainly. If you tell them which way they are to send a message, it seems to me that you would release them from what little amount of responsibility you can fix upon them at present, because they would say, "You directed it to be sent by such and such a route, and we sent it, whereas, if you had not done so we should have sent it through whichever route happened to be open."

1217. You are not able to state, are you, the comparative efficiency of the different routes between London and Constantinople. I mean the one by Turin, and the other by Vienna?—No, because we have no evidence whatever which route our messages come through. The only reason for adopting the Electric International is, that they have, I believe, a wire straight from London to Frankfort. I think that is a case in which they get the permission from a foreign Government, and it saves a good deal of time.

1218. Mr. *Turner*.] Did you not state that you preferred a private company to the Government, in consequence of your being able to fix the responsibility upon a private company?—No, I do not see that in a thing of that kind you can attach more responsibility to a private company than you can to the Government. Why I should prefer a private company is, that I think all enterprises of that kind are better carried out by a private company, because it reduces itself to a question of pounds, shillings, and pence, in which private enterprise always takes a greater interest than the Government does.

1219. Supposing a private company conducted the service through from England to India, do you think that it would pay a private company, because a calculation has been given in evidence, that out of 5 *l.* 1 *s.* which is paid for a message to India, only 3 *s.* 6 *d.* in one case, and 2 *s.* 6 *d.* in the other, is received by the private company?—That is so; but a company here obtaining a concession from the foreign governments to erect a wire, or a set of wires, through such foreign kingdoms, would get the whole payment for the message, and would be only at the expense of putting up wires.

1220. If they could do it all, then the whole operation would be in the hands of the private company?—Yes.

1221. But as matters exist at present, the responsibility of the private company does not amount to much?—No; because if anything goes wrong in your message, and you complain, they simply send you an answer that your message was despatched over their wires, and that they have forwarded your complaint to the government next concerned.

1222. Therefore

1222. Therefore, unless you could get the present system altered, the responsibility of a private company amounts to very little?—Very little.

1223. In point of fact, it amounts to nothing?—I may say that it amounts to nothing.

1224. As regards the Indian Government I presume that it would be very desirable to know whether the mistakes that occur, occur in the territories of the Indian Government or not?—It would be some satisfaction, although a very poor one, because the loss is incurred, and there is no remedy for it.

1225. But you would have a much better chance of getting redress, would you not, from the government of India than you would from Turkey, or from other foreign governments through whose territories messages might be sent?—I do not know whether you would have a much better chance of getting redress, the amount involved would be so considerable that they would be paying away the whole revenue of the company.

1226. You think that the chance of getting redress would be equally hopeless in the one case as in the other?—Yes, I think so, because a mistake may occasionally happen, and it may be a very serious one.

1227. Do you think that any great advantage would result, provided a complete record were kept of all messages either received or sent from a frontier town in India to a foreign country, as to when the message has left the Indian Government; and also when it has either been received

by the Indian Government, or left the Indian Government. If such a record were kept, you could so far check whether or not any mistake had occurred within the jurisdiction of the Indian Government?—That would be satisfactory in so far as tracing it and knowing where the mistake took place, but beyond that there would be no advantage, and I think any chance of getting redress would be very small.

1228. Still it would be an advantage in this sense, that you would find out where it had arisen?—Yes, because if you found mistakes frequently occurring in the same division of the line it would be very apparent that there was something wrong, which must be altered either by changing the employees, or some other means.

1229. Mr. Childers.] Are you acquainted with the systems of telegraphy at all?—No.

1230. I suppose you are aware that the system of telegraphy to India is Morse's Recording System?—No, I am not aware of that part of it at all.

1231. Mr. Moffat.] Do you ever send messages in duplicate, one through one Company and the other through another?—Only in the case of one message. We sent one message to Calcutta through the Electric Company and one through the Submarine, and the difference of time was simply a matter of an hour or two.

1232. Were they each equally inaccurate?—There were one or two trifling mistakes in each, but they were nothing of any very great importance.

CHARLES WELLINGTON HOWELL, Esq., called in; and Examined.

1233. Chairman.] I BELIEVE you are the Secretary to the Peninsular and Oriental Steam Navigation Company?—I am.

1234. Your Company has the whole of the contracts at the present moment for conveying the mails between this country and the east generally?—It has.

1235. Will you be so good as to supply the Committee with the number, the tonnage, and the power of the vessels employed by the Peninsular and Oriental Company?—We have at the present time a fleet of 57 vessels: that is including one or two vessels which perhaps might be called tugs, but they are a large class, vessels of from 180 to 200 tons. We have 66 ships in all, including sailing and store ships, the total tonnage being 97,165 tons, and the horse power 19,180.

1236. Some of those vessels are employed in the Mediterranean and some on the other side of Suez, are they not?—Yes; the larger proportion, east of Suez.

1237. Are the terms of your contracts to be found in the contract of the 27th February 1866, and the various contracts therein recited?—What you refer to as the contract of February 1866 is scarcely a summary of our contracts. It was a special agreement, entered into between the Company and the Post Office, with reference to certain surveys. The contracts are recited there, but I do not know whether that agreement can be taken as an actual guide to what our contracts are. If you desire to separate, for instance, the money received upon one part of our line from that received upon another, I think that we should have to go back to the original contracts.

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1238. Which are recited in this, I presume?—I believe they are. Our existing contracts are referred to in this agreement.

1239. The rate of speed now is regulated by clause 9 of the contract of the 27th of February last, in supercession of any other terms contained in the previous contracts?—The rate of speed is in some measure affected now by a time-table, which is agreed upon at the commencement of every year between the Company and the Post Office, in which a date of arrival and departure at every port is fixed for the mails throughout the ensuing year; and, to a certain extent, the rate of speed is governed by that table.

1240. In the contracts themselves, the Company is bound to carry the mails at a certain speed per hour?—Yes.

1241. In the contract of the 27th of February, it appears that the Company is bound to perform the voyages between certain specified ports in a certain number of hours?—That is so.

1242. Taking, for instance, the case of Suez and Bombay; between those ports, it appears from Paper No. 7, on page 16 of the printed papers before the Committee, that the whole number of nautical miles run in performing 48 voyages was 142,656, which gives a distance from Bombay to Suez of 2,972 miles?—That is the distance upon which our calculations are made.

1243. You are bound, are you not, to perform that service in 312 hours?—Yes.

1244. Dividing 2,972 miles by 312 hours, it appears that you have to perform the voyage at the rate of $9\frac{1}{2}$ nautical miles an hour?—Yes. We have to perform the voyage at the rate of $9\frac{1}{2}$ knots an hour.

1245. How many knots are nine miles equal to?—

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to?—All our calculations are made upon the nautical mile or knot. I may mention that we are bound to deliver the Bombay mail in 24 days 16 hours in London.

1246. Why is the service split up in your contract with the Government into subordinate distances?—The Bombay service is a peculiar one, inasmuch as it grew up gradually and was taken in fragments. We had lines in the Mediterranean, and we had no lines in connection with them to Bombay. We began our communication with Bombay, by taking the line from Bombay to Aden only, in connection with the existing communication with Calcutta and other more distant places. At present there is a completely independent service direct from this country to Bombay. The history of these matters is contained in a statement which was prepared for the Parliamentary Committee of 1860, but the proceedings of that Committee took so much of a political character, that we really had not an opportunity of getting our case considered. I can put in a copy of this statement, with a supplementary one, bringing it down to the present time, and I think that these statements would be found to be very useful documents for reference by the Committee (*delivering in the same*).

1247. You have to carry the mail between Suez and Bombay at $9\frac{1}{2}$ knots an hour, does that include stoppage at Aden?—No it does not; the agreement of February last was also for the purpose of enabling the Post Office to carry out a system which they were very anxious for, bringing us under penalty and premium clauses with reference to our India and China contracts. Previously to that we had been only under the penalty system on our Australian contracts, and I may state that the company have from the commencement rather objected to premiums and penalties, entertaining an impression of their uselessness, because they have no effect in expediting the mail; we therefore generally preferred to tender in such a form as not to bring ourselves under those conditions which imposed penalties, and granted premiums, but the Post Office have all along desired to introduce uniformity in their system; while every Committee almost that has sat upon the subject seemed to be under the impression that penalties were useful, and at last we gave way upon the point.

1248. Then the whole of your services are now conducted upon the system of penalties and premiums?—Yes, the whole of them; I may repeat that the stay in port has no effect upon the matter; the penalties or premiums being governed by the time consumed upon the voyage, that time being calculated from the minute the steamer is set in motion to the time that she stops at her port of destination.

1249. When you state that you are bound to convey the mails to Bombay in 24 days 16 hours, between what ports do you mean?—That is the whole distance from London to Bombay.

1250. Are you responsible for the time that is consumed in carrying the mails through France?—No: we are not responsible for that.

1251. By clause 9 of the contract to which I have referred, you are bound to convey the mails between Marseilles and Alexandria in 155 hours, and subsequently between Suez and Bombay in 312 hours. Supposing that you exceed your time between Marseilles and Alexandria, and that you are within your time between Suez and Bombay, is the one set off against the other?—In such a case as that, if we exceeded

the time between Marseilles and Alexandria, we should come under the penalty, as between those two places, and between Southampton and Alexandria in the same way; and if we did the work within the time between Suez and Bombay, although part of the same complete voyage, we should receive a premium in respect of that part of the line. I may mention that the penalties and premiums are not equal, the premium is a small one, and the penalty a large one; the one is double the other.

1252. The premium is 25 *l.*, is it not, for every day that you are within the time, and the penalty is 50 *l.* a day?—Yes; the post office urged us to make the penalty four times the amount of the premium; but to that we objected. It is so quadrupled on the Australian Line, the penalty being 200 *l.* and the premium 50 *l.*

1253. Is this speed of $9\frac{1}{2}$ knots an hour the highest rate of speed to which you could attain with your present vessels?—That is as high an average rate of speed, I think, as we could safely enter into a contract for with our present fleet. I may state perhaps that there is a very great misapprehension existing generally with regard to the rates of speed attained not only by our own vessels, but by those of other companies carrying on ocean mail services, and by the French postal steamers also. I am prepared, if the Committee wish it, to put before them not mere opinions on this matter but actual results.

1254. Can you give us those results with regard to the French service in the east?—With regard to the French service in the East I have not got them in detail; but I yesterday looked through one of the last reports from their Board to their shareholders, in which they state that the speed that they had attained during the twelve months ending May 1865 (the date of their last report) was $9\frac{1}{2}$ knots, which is exactly the same as ours; and this is borne out by calculations which I have made upon the table of arrival and departures of their steamers which was before the Committee at their last meeting.

1255. Do you happen to have a list of the steamers if the Messageries Imperiales Company?—No, I have not a list of the vessels with me. While we are upon the subject of the Bombay service, there is a matter which I would wish to mention, because it led to a communication with the Post Office yesterday. In the papers which have been furnished to the Committee the cost of the Bombay Service is set down at 80,000 *l.*; that is inaccurate, and I believe the Post Office authorities are quite ready to correct it. The actual cost of the service is 48,000 *l.*, giving us a rate per mile upon that service, which I believe is the lowest paid for any ocean service. The rate per mile that we receive on that service is 2 *s.* 7½ *d.*

1256. What do you receive in a lump sum for that particular service?—£. 48,000 per annum.

1257. And that divided by the number of miles run brings you 2 *s.* 7½ *d.*?—Yes.

1258. What is the average altogether for the whole of your India and China Service?—It is now 4 *s.* 5½ *d.*, a trifle under 4 *s.* 6 *d.*

1259. Have you had any communications recently with the Post Office with the view of making alterations in your existing contracts with regard to the despatch of a weekly mail to India?—Yes, but not very recently.

1260. At what time did those communications take place?—I think about 12 months' ago, we were in communication with the Post Office; perhaps

perhaps not so long as that. It was in consequence, of a memorial signed by a large number of merchants in the City; and an inquiry was made of us, which was, in fact, the echo of that memorial, whether it would suit us to undertake a weekly service between England and India upon all our lines; that is, dispatching the mails on a fixed day in the week, in lieu of four times a month as at present.

1261. What reply did you make to that?—We replied, that there would probably be some difficulties at first, owing to the peculiar character of our services, the complicated nature of them, the number of junctions we have to make, and so on, but that we saw no insuperable difficulty in the plan; and would be willing to undertake it; but that as the system would involve the performance of 13 voyages per annum upon all our lines, as against 12, we should require a corresponding increase to our rate of subsidy upon all the lines.

1262. One-twelfth more?—Yes, one-twelfth more, amounting in all to 35,024 £. per annum upon all our existing services; we, however, reserved to the Company the right of claiming the restoration of the existing system.

1263. Have you considered with the Post Office the question of having a weekly mail to Bombay in supercession of the fortnightly mail to Bombay and the fortnightly mail to Calcutta and Madras?—Yes, we have given that subject some consideration. We received communications from the Post Office upon the subject some time ago.

1264. Did they ask you to consider the terms upon which you would be prepared to undertake that service?—No, I do not think they asked us for a tender. They asked us our terms for a separate service between Bombay and Aden, which should give a complete weekly service to Bombay in connection with one of the Calcutta and China lines.

1265. It is the almost unanimous opinion of the witnesses who have appeared before this Committee, gentlemen practically acquainted with the commerce of the east, that in the interests of that commerce it is desirable that a weekly communication should be established between Suez and Bombay; and they say that according to their experience it is wholly unnecessary to maintain, for postal purposes, a line of packet steamers between Aden, Galle, Madras, and Calcutta for the purposes of Indian communication; do you think that there would be any difficulty in arranging upon terms for a modification of the existing services so as to meet those views?—That is a matter which, of course, requires a great deal of consideration. The company are always ready to entertain any proposal that is put before them; but under existing circumstances, I hardly fancy that we could very well give up the communication to Madras and Calcutta. With the large number of ships that we have, we require a port such as Calcutta for docking and repairs, and other purposes. We should have to send our vessels probably up the east coast, whether we had mails or not, and I very much question whether the time has come when the railway communication would enable passengers from Madras and Calcutta to cross the country and join the Bombay line.

1266. It is stated in evidence that the communication by railway between Bombay and Calcutta will be completed in from one to two

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years from the present time, and that the distance will be 1,400 miles; that would be at the rate of 20 miles an hour, only 70 hours of continuous travelling?—Yes.

1267. Should not you think that a great many passengers would prefer to go to Calcutta by that route instead of going round by sea?—As far as our experience goes upon the question as to whether passengers would prefer railway travelling to sea travelling, I should say not. We have had many years' experience upon a part of our line, which perhaps affords some test, and that test is the ability that passengers for India and China have to embark either at Marseilles or at Southampton; we find that passengers are by no means deterred from embarking at Southampton, even in the roughest seasons of the year. Ladies and families almost always embark at Southampton. The season of the year when our outward passengers are most numerous is exactly the season when the passage by the Bay of Biscay is the worst, and yet we do not find that passengers, as a rule, choose the railway route as against the sea route; in fact, the rule is the reverse.

1268. In point of fact, you do not think that there would be any very great divergence of the passenger traffic to the eastern part of India, after the establishment of the railway communication through, from Bombay to Calcutta?—So far as my personal opinion goes, I should say not.

1269. Then, so far as the profits of your company are concerned, you do not expect any falling off from your present receipts, from the conveyance of passengers between Aden and Calcutta?—I should say not. We have merchandise also to convey to and from Calcutta and Madras, and of course any change that interferes with our commercial traffic must throw a greater amount of cost upon the postal service.

1270. You would not found your claim to any increased subsidy upon any fear of losing the traffic?—I think we might have to do so.

1271. Would your company be prepared, if specific proposals were made to it by the Post Office, to consider terms for the establishment of a weekly mail to Bombay?—Decidedly so. Much of course would depend upon the nature of the conditions. Terms and conditions have sometimes been proposed, which we considered to be objectionable and onerous, as they were in the case of the very communication which was suggested, and which fell through, with regard to the communication between Bombay and Aden.

1272. In the event of that weekly mail being established between Suez and Bombay, and in the event of the Government discontinuing to pay you for the conveyance of mails between Aden and Calcutta, and you still finding it expedient for your own purposes of trade to run a line of steamers to Calcutta, should you think it desirable that those steamers should join with the Bombay line at Aden, or that they should run on to Suez?—I think that Aden would in any case, be a most inconvenient port for a junction or terminus. As it is, there is difficulty in carrying on the mere coaling business there, but it is a port that presents very little facility for the transshipment of cargo; while there is no hotel accommodation on shore for passengers, in the event of a day's detention, or anything of that kind.

1273. And not a very desirable place to put up at under any circumstances?—No; in fact, I may say that it would be impossible under existing circumstances.

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1274. So far as the arrangements of your company are concerned, should you be able to dispense with your steamers calling at Aden, on their way from Suez to Bombay?—This would no doubt render necessary the construction of vessels specially suited for the purpose, and I very much doubt whether anything would be gained by such an arrangement, because a vessel constructed to carry coals the whole distance from Suez to Bombay, which is rather a long run, must be a vessel of very large class and power; and it might be useful to save time for her to stop and take coals at Aden, rather than to go away from the terminal port very deep, and arrive at the other terminal port very light, both which conditions are adverse to regularity and to the accomplishment of the purpose.

1275. Your present vessels, as I understand, are not capable of making the voyage from Suez to Bombay without coaling intermediately?—No, I may say they are not; we never try it.

1276. Then it is hardly worth the while probably of this Committee to pursue the enquiry, without considering also the necessity of your providing a larger class of vessels for the purpose?—Not in the sense of the questions which you have been putting. Having heard the evidence given on the first day, I am prepared to state that if required by the Committee we could furnish an estimate, and I think give a very correct idea of the kind of vessel that would be suited for such a line, and I think I may say that it would not be at all the kind of vessel that was submitted to the Committee on this day week.

1277. From your experience do you think that that kind of vessel which was suggested the other day, could accomplish the purpose?—I believe that the vessel proposed the other day, suggested a combination of impossibilities, and that it is quite out of the question that such a vessel would perform the service.

1278. You stated, that you would be prepared to give the Committee something in the nature of a scheme for carrying out such a service, if the Committee desired it; perhaps you could state now, what sized vessel you would require for the purpose, such vessel not calling at Aden?—Those are points requiring professional knowledge, which I do not exactly pretend to have; but looking at what is done upon other lines, we should hardly be able to venture upon it with vessels, other than those of a large and powerful class, such as the Cunard vessels. The line is as long as theirs, and notwithstanding what the Committee have heard, we are totally opposed to the opinion that the navigation of the Indian Seas is more easy than that of the Atlantic; on the contrary we believe that we have far greater difficulties to contend against in effecting regularity of service, and in attaining speed, than are encountered upon the Atlantic.

1279. Should you require to enlarge the size of your vessel in proportion to the increased speed that might be required; for instance, if one class of vessel will suffice for the voyage at 9½ knots an hour, should you require to enlarge the size of that vessel to go 11 knots?—Certainly, if she had to carry coal for the whole voyage.

1280. And in proportion the expenses would mount up to a very great increase?—Very great, and I am now prepared to give you the prices of coals, as the subject was mentioned the other day. The return which I have here is based upon the very last price that we paid for coals at Suez,

Aden, and Bombay and it also is calculated upon the average paid for the last five years. Our last contract price for coals delivered at Alexandria, from which place we now supply Suez, was 40 s. 2 d. per ton. The conveyance of those coals across Egypt cost 28 s. 6 d. To the price at which coals are delivered at any of our depôts we always add 25 per cent., to cover the expenses of landing and re-shipping on board the steamers, waste, storage, and depreciation of the coal, and interest upon capital invested at those ports in barges and in every way. We find from experience that 25 per cent. is only sufficient to cover all the expenses which arise between the time of the delivery of the coals at a port and the time that they are placed under the furnaces of the steamer, so that this total gives for Suez a present price of 85 s. 10 d. per ton for coals.

1281. That is to say, in keeping your accounts, do you charge your vessels with coals at 85 s. a ton?—Yes, every ton of coals that we take on board at Suez costs us now 85 s. 10 d.; without that 25 per cent. it is 68 s. 8 d.

1282. Mr. Childers.] You debit the voyage with 85 s. 10 d. per ton?—Yes.

1283. Chairman.] And you make no profit upon the coal shipped?—No, the last transaction was 85 s. 10 d., but the average for the last five years for Suez is 73 s. 6 d. We are just now suffering from very high prices at Alexandria.

1284. You take those coals, I suppose, upon a large contract?—Yes, upon large contracts. We invite tenders; we do not advertise for them, but we send to 15 or 20 houses; in fact, to any ship brokers with regard to whom we are satisfied that they will be able to supply the quantity desired, and we specify a certain time when we shall be prepared to receive their tenders.

1285. Does not the price of coal depend very much upon the season; for instance, at the time that you shipped your coal for Alexandria, you got that coal cheap?—Yes, the price is influenced by seasons, and it was for that reason that I also gave the average of five years. Of course we take advantage, so far as we can do, of the seasons to place our coals at the stations on the best terms.

1286. Have you facilities for conveying coal by rail across from Alexandria to Suez?—We now supply Suez entirely by Alexandria. We hope soon to get those rates reduced, but the actual cost of our last conveyance of coal was, as stated, 28 s. 6 d. I believe that the Pasha promises us a rate of 15 s.

1287. Looking forward for five years ahead, for instance, you would hope to get your coal supplied upon the average at a sum much less than 85 s.?—I should not think it would be safe to say much less; our experience now extends over a very great number of years.

1288. What description of coal is it that you use?—We take a certain portion of Welsh coal, and a certain portion of north country coal. For Aden, our last price, when we took a very large contract for 18,000 tons, was 52 s. 4 d. per ton, and adding 25 per cent., that gives 65 s. 5 d. per ton as the cost of our last operation. The average of the five years at Aden is 44 s. 9 d., 25 per cent. upon that is 11 s. 3 d., making 56 s. per ton. Present prices are high as compared with the average, and I am afraid that those high prices are likely to continue, and that ought to be borne in mind in anything the Committee may have in view with regard to prospective agreements.

1289. Do you find outward freights to India at

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at the present moment rather high?—We get coals cheaper in India when the homeward freights are high, for then ships are attracted to India to bring home cargoes; it is the low freights from India that create the high prices of coals.

1290. Is not it the fact that freights are low in India at the present moment?—*Ergo*, we are now paying high prices for coals.

1291. What is the price of coal at Bombay?—Bombay, in the last contract, was 55 s. 2 d.; 25 per cent. upon that brings it up to 69 s. per ton. The average of the last five years is 35 s. 6 d., and 25 per cent. upon that is 8 s. 10 d., making a total of 44 s. 4 d.; so that at Bombay the rate is exceptionally high at present.

1292. Do not you find that 25 per cent. is a very ample covering?—No, we have not found 20 per cent. enough; I may tell you how we first came upon this 20 per cent. In the earlier days of the Company we now and then indented upon the depôts of the Government; in carrying on the mail service they allowed us to remove coals from those depôts, sometimes paying for them, and sometimes returning in kind. When we paid for them they charged us always 20 per cent. upon the cost price; so that we naturally followed in their steps, and we now charge them the same, but we find that 20 per cent. is not sufficient.

1293. Mr. Childers.] Coming back to the general question; your contracts now are very nearly uniform, or they are all of them based upon time between different ports, and not upon knots an hour?—The contracts are upon knots an hour; and then we have a time table which we agree with the Post Office every year, which reduces it to very much what is stated in the question.

1294. And upon that time table your penalties and premiums are calculated?—Yes.

1295. So that, practically, you are working upon a time table of hours from port to port, and not upon a rate of speed?—Yes, it is so.

1296. You are also working now with respect to all your contracts upon a uniform rule as to surveys; that is to say, a special survey has been discontinued?—The principal survey that is discontinued is the survey for speed before the vessels are put upon the line. In order to make it certain that we should obtain our contract speed upon the line, there were clauses in all of our earlier contracts requiring that every vessel should make a trial trip, and that she should attain 12 knots an hour when loaded to the load line. That was, in a certain sense, a guarantee that she would, on the average, perform her work at sea.

1297. My question was that all your services are now in that respect upon the same footing?—They are.

1298. They are not, I think, quite upon the same footing as to notice; you are working this contract from Galle to Australia upon two years' notice?—Yes, we are working that contract upon two years' notice.

1299. All the other parts of your contracts are upon one year's notice?—They are now upon the one year's notice; they have come upon that by effluxion of time. Our main East India and China contract was taken in 1853, for a term, I think, of eight years; and that, of course, has long since expired.

1300. So that the whole of your contracts now, in fact, are precisely upon a uniform system of penalties and premiums, and a uniform system as

to notice, except the Australian contract, which is two years instead of one year?—Yes; the Australian contract is hardly to be called a contract as it stands at present; it is a continuation for two years of the old contract, although it is taken on lower terms.

1301. Still it is correct to say that all your service is now upon one footing, except in that one respect?—Yes.

1302. With respect to cost, I think that you stated that the return put in the other day was inaccurate, and that the figure for the Southampton, Marseilles, and Bombay service ought to be 48,000 L.?—Yes; a communication was made to Mr. Chetwynd yesterday, and he admitted that the memorandum we submitted to him was correct, and I may state that he is prepared officially to correct his figures.

1303. But the difference between the two would have to be added to one of the other two items into which the contract is divided?—Yes, the difference between 48,000 L. and 85,000 L. would belong somewhere else.

1304. It does not belong to the Australian service?—Certainly not to that; it requires to spread over the others.

1305. Therefore it belongs to some other part of the service, as to which you have now the same notice as the Bombay service?—Exactly.

1306. So that in the event of the notice being given to you upon the whole service, it makes no difference whether the 48,000 L. belongs to Bombay or Calcutta or any other branch?—Not much; the way we put it to the Post Office is this: if you take from us everything but the Bombay line, what should we have left?

1307. If notice were given to you as to the whole service it is quite immaterial, it is a mere question in dividing the whole contract into sections, whether too much or too little, shall not be attributed to the Bombay section?—It is immaterial; we are naturally desirous to have that error corrected, because we heard the other day so much about the enormous rates of subsidy, in connection with Bombay, and as the rate of subsidy for Bombay is exceptionally low, we were desirous of having it properly represented.

1308. But the same amount which would have to be deducted from that item would have to be added to one of the other items, the whole being practically now one contract?—Exactly.

1309. You stated, did you not, that you did not anticipate that at present passengers would not be much diverted from the sea route by the completion of the railway between Bombay and Calcutta?—I scarcely think they would. Many passengers coming from the interior of India, from the North-western Provinces, might find it more convenient, if communication existed, to come down to Bombay or to Kurrachee and thence to Bombay, and embark there instead of making a railway journey to Calcutta and embarking at that place.

1310. But with respect to Calcutta and Madras individual passengers, you think that they would rather lose time by going round by Galle than be subject to the inconvenience of having that kind of transshipment at Bombay?—I think they would; the conveyance of their baggage and personal effects would form an important item in this calculation.

1311. You compared that with the Marseilles route; but is not there this difference, that from London to Marseilles involves three transshipments on the way?—That may perhaps enter into

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into the calculations of those who have to adopt one course or the other; but the facilities, as between London and Marseilles, are great, and I should imagine that railway travelling in Europe must differ very much from railway travelling in India.

1312. What is the time occupied on the voyage from Suez to Galle, do you remember?—Sixteen days.

1313. What is the time from Suez to Calcutta, at present?—Four hundred and ninety-nine hours.

1314. That is 21 days?—Yes.

1315. From Suez to Bombay, what is the time?—Three hundred and twelve hours, equal to 13 days.

1316. You do not think that that difference in the sea voyage would be sufficient to induce Calcutta passengers to go to Bombay?—My own opinion is that it would not.

1317. Supposing that such a course were adopted by the Government as to establishing a weekly mail between Suez and Bombay, and supposing, which you think is not probable, that the Galle and Calcutta line would be practically little used, would your ships fill with passengers from China twice a month and from Australia once a month, by Galle to Suez?—Not at all seasons. There is this peculiarity about our service; it is like the tide; it is one way one six months of the year, and the other way the other six months. Our vessels are, comparatively speaking, empty going outwards in the spring of the year, as at the present season, and loaded coming home; and in the autumn it is exactly the opposite.

1318. Is that the case with respect to China?—Yes.

1319. To the same extent as to India?—Not perhaps to the same extent.

1320. Is it the case with respect to Australia?—Yes; the Australians, for some reason, have fallen into the fashion of going out in September, October, and November, and coming home in the spring.

1321. Do any considerable number of Australian passengers go by your line?—Not a very large number.

1322. You discourage it, do not you?—No; we like to have as many as we can accommodate, but we are in some difficulty in the matter; the steamer from China, the steamer from Calcutta, and the steamer from Australia, meet at Galle, and the passengers have to come on from there in one vessel, or rather the same vessel that leaves Calcutta and comes for Suez.

1323. Are not your passenger rates from Australia such as practically to discourage Australian passengers?—By no means; our rates from Australia are much lower in proportion, taking a rate per mile, than our rates with other distant places, with China and Calcutta.

1324. But are not your rates with Australia so much in excess of the sailing rates to Australia, that you take only a very small proportion of passengers?—We take a small proportion compared with the number travelling; but it is difficult to say what the rate by a sailing ship is, because sailing ships will take passengers at one price if they cannot get them at another.

1325. Is not it the case that the proportion of Australian passengers was for a short time very much larger than it is now by your lines, and by the other company that came up to Suez?—No; I think we are carrying more Australian passengers now than perhaps we have done at any time. I am speaking of through passengers.

1326. Are the Committee to understand that it is your opinion that the China and Australian passages would, excepting in the slack season, fairly fill your ships if the line was limited to them?—They would, perhaps, at certain seasons; in the busy season I think we should have full ships from Calcutta, China, and Australia together.

1327. Supposing that the Galle and Calcutta service came to very little, and that the ships from Suez to Galle and from Galle to Suez practically took only the China and Australian passengers, would they be sufficient to fill your ships, except in the slack times?—I think there are some months in the year when we should fill, under those circumstances.

1328. Do you ever have to run duplicate ships from Galle to Suez, or from Suez to Galle, in crowded seasons?—We have done so, but when we have done it, it has always resulted in loss. If we have done it, we have done it for the accommodation of the public, and to relieve ourselves of pressure upon the ordinary vessels; but seeing that the vessel has to go entirely empty one way, our rate of passage-money has not been sufficient to cover the double voyage.

1329. If your China service were reduced to one ship a month, and that were connected with the Australian service at Galle, would you fill that ship, do you think, satisfactorily with passengers?—I think there might be passengers enough to fill one ship a month. The service was in that condition for a time, but the necessity of a double line was very soon felt, and felt in a manner that very soon brought about its restoration.

1330. The necessity of a double line from where?—A double line from Bombay to China, creating a double line from England to China.

1331. Was it the part of the line between Galle and China which became so crowded that you were required to double it?—It was the absence of the postal communication that led to complaint on the matter, and to the restoration of the double mail.

1332. I am speaking of passengers; and I want to know whether the passenger service between China and Galle, connected with the Australian service between China and Galle, was more than sufficient for one monthly communication?—I think it would be found to be more than sufficient for a monthly communication at the present time.

1333. Do you give that as the result of figures?—I am now speaking without figures, and it is rather hazardous, perhaps, to state anything positively upon this matter.

1334. When the complaint as to the service to China being only once a month was so strong, there was no other postal service except yours, was there?—There was no other at that time.

1335. Now there is the monthly French service, is there not?—There is the French service now, monthly.

1336. Considering that monthly French service, which is to last for many years, are you of opinion that, between you, the passenger service from China to Europe, is more than sufficient for two boats a month?—I think it is rather difficult to bring us into comparison with the French steamers at all. Under the terms of the French contract, they have to carry a very large number of Government officials, and, also, troops. I observed yesterday in the "Times" the arrival of

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one of their steamers at Galle, with 200 passengers. Many of those are probably not what should call passengers.

1337. Is not a very large proportion of your passengers Government officers?—Yes; but now, under an arrangement which, perhaps, is before the Committee, we do not know the distinction between Government passengers and ordinary passengers, as we formerly did; we receive the same rate of payment for both.

1338. You receive the same rate of payment, is it still you know as a fact, that you are paid by the Government for Government passengers, do you not?—In some cases we are; in others we receive an order from Government to provide a passage for so-and-so, who is going out on official business, but we do not always know whether a passenger pays his passage-money out of his own pocket, or whether it is paid to him by the Government, as he pays us.

1339. Still, without knowing the fact in each case, is there any doubt that a large proportion of the passengers from China are public servants?—A very considerable proportion, from China particularly, seeing that there is always a fleet there, and especially since the communication has been opened up with Japan.

1340. Do you work harmoniously with the Messageries Impériales, as to rates and fares?—Entirely so; we are on the most friendly terms with them.

1341. And in fixing their time table, they had no regard to your time table, had they not?—I think they were guided by our time table.

1342. Did they send you over no communications?—Personal communications took place; and, with regard to fixing the dates of departure, they had a complete knowledge of what our movements were, and no doubt they were guided by that in fixing their own times of departure; but it would be a more difficult thing than appears at first sight to work the service alternately.

1343. In the first place, it could not work at present alternately, because their service is a monthly service, and any such service as would be proposed must be a fortnightly service?—Yes; and then as between Galle and China, they go to Saigon; and then again, they do not call at Penang, whereas we have to call at Penang; they make a shorter stay again at Singapore than we do; we are obliged to make rather a longer stay there than we like.

1344. To those places, Penang for instance, the service would be only a monthly service, and not fortnightly?—Yes.

1345. There would be inconveniences of that kind?—Yes.

1346. Is their time of arrival from Hong Kong to Suez different from yours?—The rate specified in their contract, of which I have here a copy, is much the same as ours.

1347. Is their actual time-table for the same time as yours?—I think it is all based upon a calculation of the same rate per mile. I observe in the last report which they made to their shareholders, and no better authority can be given than their own report to their shareholders, they say: "The steamers engaged in your service have realised, as in 1863, an average speed of 9½ knots, which, for a general average, is rather high."

1348. Coming to this side of Alexandria, have you considered the prospect of some Italian port being used as your terminus on this side?—Yes, we have considered it very much, and have

taken steps to procure information bearing upon that subject.

1349. What is the opinion of your company upon that subject?—I hardly know how to give opinions when I represent the Board, but I think from the information we have collected, that we would look upon Naples or Reggio as far better ports for the mail service than Brindisi.

1350. Reggio would be almost in your line, would it not, from Marseilles to Alexandria?—We do not at present take that line. The French take that line; they go by the straits of Messina, and they do not go to Malta.

1351. For the direct service between Marseilles and Alexandria, Reggio is nearly all but touched at, is it not?—Yes, and a line by that part of Italy would bring us into connection with the producing portions of Italy, and the consuming parts also, it would bring us into connection with the richer provinces of Italy. The other side is a poorer district, and the reports which we have had of the Port of Brindisi are at present quite unfavourable as regards its suitability for the terminus of the mail service.

1352. Supposing that a weekly service was established to Bombay, should you conceive that a weekly service between Alexandria and Southampton would be necessary in a passenger point of view?—I think we should find it necessary, not perhaps strictly speaking in connection with the India service, but there are a great many passengers travelling between England and the ports of the Mediterranean.

1353. You do not touch at Lisbon, do you?—No, our Peninsular service has been discontinued altogether.

1354. Would the Malta, Gibraltar, and Egyptian passengers be sufficient in number to justify such a service in a passenger point of view?—I cannot say that; we are now working that part of the line in a different manner to what it used to be worked; we formerly ran very much larger ships between Southampton and Alexandria, than we did between Marseilles and Alexandria, for which line we had special vessels; we now work the ships round in a manner which brings each of them in turn upon the Alexandria and Marseilles part of the line.

1355. Your Marseilles passengers are not transhipped at Malta?—No, they go through.

1356. Do you always stop at Gibraltar?—Yes, just for a few hours only.

1357. Supposing it were proposed not to have a boat every week from Southampton, you do not think that that would at all diminish the charge for the contract?—I do not think it would, because there is not only the passengers to be considered, but what is quite as important, the cargo and the specie; anything which interferes with our present ability of meeting the public wants in the transmission of cargo, specie, and so on, would bear very much upon the question of the subsidy which we should require for carrying on the purely postal service.

1358. Going back to the question of cargo, have you sufficient cargo from China to India, and overland, to justify a twice a month boat, if the Government did not require it for mail purposes?—At some seasons we should not; that very second China line which we spoke of is an illustration; we began to run it at a time when we had no subsidy for it; but we found that the time was approaching when we must give it up, and we therefore informed the Government that we were about to give it up, and that led to their

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giving us a moderate rate of subsidy to continue it.

1359. That is the extra service for which you got 24,000*l.*?—Yes, 2,000*l.* the round voyage between Hong Kong and Bombay.

1360. *Chairman.*] I presume that the public of this country have no interest in that part of the voyage which lies between Bombay and Galle?—I think they have, for it is availed of to a certain extent by passengers at seasons of the year when we are pressed for room in the direct steamers for China; we then give the passengers the opportunity of going by one of the Bombay steamers which are never so full, and proceeding to China, after the Calcutta and Australian passengers have left the vessel at Galle, vacating a certain amount of the accommodation. Many passengers in our busy season go to China by way of Bombay.

1361. *Mr. Childers.*] Do not Australian passengers frequently come up to Bombay?—They do sometimes; we sometimes give them an open ticket. When our agent, in Australia, is aware that the steamer at Galle is likely to be very full, he issues a ticket to the passenger, which enables him to proceed to England *via* Bombay at the same rate of fare. We do not then make any charge for the extra distance that he goes over.

1362. The China service is necessarily extended, is it not, from Galle to Bombay, in order to make your steamers fit in?—It is so.

1363. They all go to Bombay to be docked, do they not?—Yes; Bombay now is becoming a very large arsenal.

1364. So that nothing would be saved by the China contract being only to Galle?—I do not think it would save anything.

1365. Is there any service now from Calcutta to Singapore?—I am not aware that there is any regular service. Steamers have been running frequently. We tried it at one time; we had no contract, but we ran steamers on the line, we found that it did not pay, and we very soon gave it up.

1366. *Chairman.*] Is there not any local Indian Company which has a contract for that service?—I am not aware that they have a contract.

1367. I mean the same company that has a contract from Bombay to Bussorah, and from Madras to Rangoon?—I cannot answer as to whether they have any contract. I think not with the Home Government.

1368. I mean with the Indian Government?—I really cannot say.

1369. *Mr. Childers.*] Have you any contract with the Dutch Government?—No, we have not.

1370. The service between Batavia and Singapore is a service that you have no connection with now?—We have no connection with it.

1371. You used to have, did you not?—We ran the Australian line for a while from Singapore, not *via* Torres Straits as is now proposed, but from Singapore to Matama and King George's Sound.

1372. Had you not, for a short time, a service in connection with the Dutch Government to Batavia?—No actual service; we had an agent at Batavia, and we took passengers from there by our vessels.

1373. Have you not had any service to Manilla?—Yes, we had at one time, but we were then under a contract with the Spanish Government, not with the English Government.

1374. That has been given up, has it not?—Yes.

1375. Do you know how the Manilla passengers get to and from England?—No, I do not; I believe that they are in difficulty about it at times. The Spanish Government, I need not say, are very tenacious of granting the use of their flag, in fact they would give us no facilities at all, and we found it impossible to work that service.

1376. You have a Japan service, have you not?—We are now running our vessels once a fortnight regularly between Shanghai and Japan; we began running once a month, but we have now been for some time running once a fortnight. We receive no subsidy upon that line, and we are now before the Government with a claim for a subsidy, because there would be seasons when we should have probably to discontinue it as regards our commercial purposes.

1377. The French Company, if I remember rightly, is subsidised up to Japan?—Yes; their original contract includes Japan, as it does Mauritius.

1378. Is the Mauritius service in your hands now?—It is at this moment; we make our last voyage in June.

1379. That is under a contract with the colony, I think?—Our contract, strictly speaking, is with the English Government, the English Post Office acting in the matter as the agents of the Mauritius Government.

1380. So that it is really a contract in which the colony alone have an interest?—They have the whole interest.

1381. And that is coming to an end?—That is now coming to an end.

1382. Do you know what is to be substituted for it?—The Government have accepted a tender for a service by another Company between Mauritius and Point de Galle, where it will join this Company's lines. This will bring Mauritius into more direct communication with Australia, and they will have the French line to and from Europe.

1383. Will that junction be in connection with the Messageries Imperiales, or in connection with you?—In connection with us, I believe.

1384. Is not there a French line in connection with the Messageries Imperiales to Mauritius?—Yes; the communication with Mauritius is one of the original conditions of their contract; they were to take it up at a certain period. I would like to state with regard to the Mauritius service, that it exemplifies in a great measure the difficulty against which we have to contend, when, from any cause, the passenger traffic or the cargo traffic upon a line is diminished. We were receiving what might be considered a very liberal rate of subsidy upon the Mauritius line; in fact more than double what we are now receiving upon the Bombay line; but it was always a poor paying line, and when the French came upon it, we found that we were actually making a heavy loss, and were compelled to give notice to the English Government, and through them to Mauritius, that we must withdraw our vessels; and they are to be withdrawn now very shortly, notwithstanding that the service was being performed by two most inexpensive vessels.

1385. Those vessels ran from Aden, did they not?—They ran to Suez.

1386. Did you not at first run from Aden?—Yes; but we found that it was very objectionable. Passengers had to be transferred to a vessel in which the accommodation was already occupied by passengers coming from longer distances; a process that always gives rise to great dissatisfaction,

faction, those who are on board the vessels objecting to a fresh lot of passengers crowding in upon them, and those who arrive finding the best accommodation pre-occupied.

1387. Did not your having to go to Suez instead of to Aden very much add to your expense?—We took the contract originally from Mauritius to Aden, and we received an extra amount when we consented to go on to Suez.

1388. At one time the Australian line was by the Mauritius, was it not?—It was.

1389. But it did not work at all, and you had to give it up?—It was not found to work well.

1390. Sir *Henry Rawlinson*.] Do you carry the mails to Japan now?—Yes, we do.

1391. And you get no remuneration for that?—We do not. The Post Office avail themselves of that line in the same manner as they avail themselves of any other line in respect of which we receive a subsidy; they send everything to Japan as they do on other lines.

1392. And you receive no remuneration?—No; we receive none whatever. And I may state that the Imperial interest is greatly served by the existence of that line, as it supersedes the constant necessity of sending ships of war with despatches between the ports of Japan and China.

1393. With regard to the passenger traffic as between Suez and Bombay and Suez and Calcutta, have you considered that Calcutta is only a terminus, that it is dependent for the supply of passengers on the feeders from the upper country, and that accordingly as the lines are opened to Bombay, a large portion of the passengers that have been coming to Calcutta, in order to get on board your vessels, will come to Bombay as the nearest port of shipment. You must not consider the passengers as referring merely to Calcutta, but as referring to the whole of the north-west of India; and of course, in both going and coming, they will repair to the port which is nearest and most accessible?—Exactly.

1394. And that when the lines accordingly between Agra and Bombay are once opened, your passenger supply from Calcutta will necessarily fall off?—No doubt. I think I stated, in an answer to a question from the Chairman, that probably many of the passengers who were in the interior of India, instead of proceeding to Calcutta, would, when the railway was completed, proceed to Bombay or to Kurrachee, and thence to Bombay.

1395. Do you not think that that would be much the largest proportion, Calcutta itself being a mere single town, and your great supply of passengers coming from the upper provinces of India?—We look to Calcutta and Madras both; our line on that side of India serves both Calcutta and Madras.

1396. The greater part of the Madras Presidency also will be shortly in easy communication with Bombay and all the Deccan, will it not?—Yes; but what I feel a doubt about is whether passengers will avail themselves of the railway if they have the opportunity of travelling by steamers.

1397. But you feel that whenever the distance is in favour of the western coast they will naturally repair to that in preference to going to the eastern coast?—No doubt. We must be prepared, of course, for a diminution in the number of passengers offering at Calcutta and Madras when railway communication is opened all over India, there is no question about that.

1398. Mr. *Laird*.] You stated that the speed of the French line to India is the same as yours?—Yes; the engagement in their contract is to perform $9\frac{1}{2}$ knots an hour upon their main lines, and 9 knots an hour upon their subsidiary lines.

1399. Do you know what the speed of the Cunard steamers is?—There was a Parliamentary Paper published in 1861, embracing three years of their working. I have reduced it to a summary, and I can state the result of it. The average working of the Cunard steamers for the years 1859, 1860, and 1861, comes out at 9 knots and 7 fathoms, nearly 10 knots.

1400. Is that taken from a Parliamentary Return?—That is taken from a Parliamentary Return. It is brought down only to 1862, but at that time some of their finest vessels, such as the "Scotia" and the "Persia," were on the line. There are cases in which the voyage has been performed at $12\frac{1}{2}$ and even 13 knots. But I would like to state to the Committee with regard to that service, which of course everybody admits is most admirably performed, and by the finest vessels afloat, that the same thing occurs as with us, that there is a difference between their best voyages and those which are not so good; and looking to the circumstance that their voyage is nothing like so long as ours, if the variation were extended to voyages as long as ours, it would represent as much difference as occurs between our best and worst voyages upon our longer lines.

1401. *Chairman*.] Does that average which you are referring to relate to homeward voyages or to voyages each way?—Each way.

1402. Mr. *Laird*.] It is an average for years?—Yes, an average for years; and this return shows exactly 1 knot and $\frac{1}{4}$ th per hour difference, on the average, between the outward voyages and the homeward voyages.

1403. *Chairman*.] The fact being that at the end of a speedy voyage our attention is more attracted to the good voyages than to the bad ones?—Yes.

1404. If you were to look at New York the converse would be the case, and we should become better acquainted with slower voyages?—Yes; just the same as it is upon our Australian line. We have been very successful in delivering our Australian mails in England, and at Point de Galle also; but we have not been so successful in our delivery in Sydney. Therefore almost all the complaints that we hear of about the Australian service are from the Australian end of the line, and in the Australian papers, and from the Australian Government.

1405. What do you think it arises from?—It arises from the great difficulty of performing the outward voyage as compared with the homeward voyage.

1406. Mr. *Laird*.] It has been stated that the Indian seas are much easier to navigate, and that the average speed can be better kept up there than in the Atlantic; what is your experience with regard to the voyage from Southampton to Alexandria, and from Suez to Calcutta and Bombay?—Our experience is exactly the opposite of what has been stated. If we place a vessel upon the line eastward of Suez that has been worked at a certain rate of speed, and has consumed a certain quantity of coals on the Mediterranean side, we find immediately a greater consumption of coals and a diminution of speed. We have no hesitation in saying that the service of the Indian seas is more difficult, and that

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regularity is more difficult of attainment there than it is on this side or any line that has its terminal port in England.

1407. And the consumption of coal you say is increased as well?—Yes; the consumption of coal is increased; I can give facts if the Committee wish it upon that: coal becomes deteriorated; the temperature of the sea is very high, and consequently the condensing operation of the engine is very much affected, and, in fact, we are met by difficulties in many ways that people taking a mere glance at the matter can have no idea of.

1408. With regard to the Indian service, have you establishments at Bombay and Calcutta for repairing vessels?—We have very large establishments at both places.

1409. Have you establishments anywhere else?—Our next largest is at Hong Kong.

1410. Without establishments of that kind could the service be carried on efficiently by any company?—By no company whatever; the necessity of establishments of this nature comes upon us at every moment.

1411. Are there no private establishments there where you could get repairs efficiently and quickly done?—No, I think not. There are some private docks; and the French are establishing large arsenals, especially at Suez, as they are going to make Suez their head quarters.

1412. They find it necessary in order to keep up a service to lay out a large sum of money in making establishments?—Yes, they complain in their reports to their shareholders of the expenses of those establishments; they have begun to do that already, and I do not think that they yet know the full extent of this drawback on working a fleet.

1413. There was some evidence given by Mr. Knight, in which he stated that your Company refuse to take second-class passengers, is that the case?—No, that is erroneous; I have here a return of the number of second-class passengers that we have carried during the years 1864 and 1865. In 1864 we carried from Southampton to different parts of India 635 second-class passengers, and in 1865, 636; from Marseilles in 1864, 158, and in 1865, 92; these are the numbers outwards. I have not got a return from the homeward vessels; but I am able to state that the number would be very nearly the same. I may state that we do not advertise for second-class passengers.

1414. *Chairman.*] You do not advertise a rate for second-class passengers?—We advertise a rate for first-class passengers and the servants of first-class passengers, but it is perfectly well known that we carry a large number of second-class passengers at the same rate that we charge for the servants of the first-class passengers. We are, however, obliged to protect ourselves in certain ways against people claiming a different class of accommodation when they get on board.

1415. *Mr. Laird.*] How do the charges made by the *Messageries Impériales* tally with yours; are they higher or lower?—They charge two, or three descriptions of accommodation, but on the whole they tally very much with ours.

1416. Though you do not advertise for second-class passengers you take them, do you not?—We take them. With reference to what was stated, that there was a want of desire to consider cases liberally that came before us, I have here a return of the abatements and refunds of passage money made to passengers by our Com-

pany during the years 1864 and 1865 in consideration of the connection of those passengers with missionary or educational institutions, or in respect of passages performed to and fro within short intervals, or upon representation of pecuniary difficulty and other causes which have led them to submit their cases to the Board. In the year 1864 we refunded and returned to passengers under these circumstances 7,560 l., and in the year 1865 we returned 9,760 l.

1417. How is the expense of victualling passengers on the other side as compared with the line from Southampton to Alexandria?—The expense and difficulty of victualling passengers on the other side is very much greater than on this side. We have no markets to go to, other than for a little live-stock; we can get sheep and bad poultry, but everything in the way of stores has to be sent out from England, and perhaps kept in dépôt for a long time, and consequently is put on board the vessels and consumed at a disadvantage.

1418. Do you generally send them out from here?—We send them all out from here.

1419. Can you give us any idea of the space occupied by the mails?—The space occupied by the mails is now becoming a very serious matter with us. The Post Office are every day extending facilities for the transmission of books, and parcels, and packages, and samples, and other things, which up to a certain period were brought to the company's office, and sent out upon freight; but the Post Office, not very properly as we consider, are gradually encroaching upon that part of our business, so that we not only do not receive the freight, but we have the bulk of our mails increased to such an extent, that what were originally the mail-rooms in the steamers are now in many cases found to be insufficient in size. Our Australian mail from Southampton is now a cargo for a small ship. I have a return here showing the number of tons of each mail for two years past, and in it I see that we take 100 tons of mails now from Southampton by each steamer that is in connection with Australia.

1420. *Mr. Ayrton.*] Is that weight or measurement?—On the 4th of January 1865, we had 189 packages of mails, weight 8 tons, measurement 18 tons.

1421. *Mr. Turner.*] You do not mean two parcels, 26 tons, in all?—No, I give the weight as 8 tons, and the measurement as 18 tons; that was the India and China mail. With regard to the Australian mail of the same month, I find that it amounted to 1,098 packages, weighing 45 tons, and 99 tons of 40 cubic feet measurement. I recollect particularly that upon the occasion of the marriage of the Prince of Wales the mail was something enormous; the quantity of letters and newspapers sent out was increased by about one-third.

1422. *Chairman.*] There is no limit, is there, to the quantity of mail matter that the Postmaster General can send on board?—No, there is not. When the system of sending books by post was first adopted, we had some idea of making a protest against it, because we questioned whether it came within the meaning of our contract, and had we anticipated the extent to which the practice has grown up, I believe we should have made a protest at the time.

1423. Have you made any representations to the Post Office on the subject?—We have not made any official communication. A short time ago

ago it was mentioned, and Mr. Frederick Hill appeared greatly surprised to find that it had assumed the present proportions.

1424. Mr. *Laird*.] Are the mails sorted on board?—On the Mediterranean side they are, but not on the other side.

1425. If it were required that they should be sorted between Suez and Bombay, would that add very much to the room that they would take; would it require a larger space to do it in?—It would require a considerable space.

1426. In addition to the 100 tons occupied by the stowage?—Yes; what we call the post office on board occupies a very considerable space on this side, but we can spare it better on this side than we can in our vessels on the other side.

1427. If it were required that the sorting should be done between Australia and India and Suez, would it require a considerable portion of the vessel to be appropriated to that purpose?—It would require probably the space at present occupied by two or three passengers' cabins, which of course represents a good deal of money.

1428. Mr. *Weguelin*.] In order to sort 100 tons you would require a large space in the room?—The boxes would be brought up a few at a time. There is a Post Office staff on board, and a certain number of boxes would be brought up every day and dealt with.

1429. Mr. *Laird*.] There is one thing stated in the evidence of Mr. Knight which I think must be a misprint. He states, "You will find that it makes an average of 34 days 13 hours for carrying the Marseilles mail from London to Bombay." Is that a correct statement?—It must either be a misprint or perhaps it was a slip of the tongue in speaking. The time actually occupied has been something less than the contract time. I think I may state that the average accomplishment is $24\frac{1}{2}$ days as against 24 days and 16 hours, which we are allowed. With regard to questions which have been asked on the subject of provisions, I may be permitted to mention that the amount which we have to send out is something very enormous. I have a return here showing that during last year there were consumed 1,301,000 bottles of wine, spirits, beer, and soda water on board all the company's steamers; and there are other figures of the same character, all of which, of course, have to be taken into consideration in connection with what has been stated about our so-called extortionate rates of passage money. I would ask permission to say a few words upon that point. Our rates of passage money, if taken at so much per mile, will compare very favourably with the rates of any other ocean company which carry passengers; they will compare with the Cunard line, or any other of the first companies; but if taken in comparison with the cost at which our service is carried on east of Suez it will be found that our rates of passage money are very much lower than those of any other steam company. A statement was made to the Committee this day week, in which our passage money from Bombay to Suez was represented to be higher than it is, namely, 75 *l.*, whereas the rate is 60 *l.*, and by the process of calculating how many days are consumed on that journey, a result was arrived at which appeared to be high. That, we consider, is an unfair mode of dealing with our rates of passage money, and of bringing them into comparison with others, inasmuch as our voyage from Bombay to Suez is that part of our line which is extremely costly to us. We claim that the rate

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should be taken from Bombay to Southampton, and if that is done it will be found that our rate is only the same per mile, or within a fraction of it, as that of other companies. With regard to those passengers who choose, for their own convenience or for any other reasons, to travel by us for only that part of our route which is carried on at a very greatly increased cost as compared with the other part of the distance, we think it is only fair that they should pay something more in proportion. If a passenger by railway travelled between station and station, paying intermediate fares, he would probably have paid more at the end of a journey than he would have done if he had taken a through ticket; and this is the basis of all the misapprehension that exists in the East with regard to the rates of passage money on the Company's lines. If they are taken at a through rate they will compare very well with those upon any other line.

1430. You find wine, do you not?—Yes, we find wine, and the figure I have mentioned gives an idea of the quantity consumed.

1431. You are aware that they do not do it in the Cunard service?—They do not. Our provision account for a year is not much short of 300,000 *l.*

1432. With regard to this proposed line from Suez to Bombay, it has been proposed to run a line of vessels there in 10 days, from Suez to Bombay, without calling at Aden; that would be an average, as stated in the evidence, of $12\frac{1}{2}$ knots an hour. From your present experience, looking at the difficulties of navigating the Red Sea, which have been stated, what speed would a vessel of that kind require to go at per measured mile, in order to accomplish an average speed of from $12\frac{1}{2}$ to 13 knots an hour?—Our experience, I think, is this, that at the time we were obliged to put our vessels over the measured mile to attain 12 knots an hour in order to give a prospect of making an average of 10 knots at sea, the test of the measured mile was not anything too high. In fact, in some cases where we attained $12\frac{1}{2}$ or 13 knots on the measured mile, we did not more than succeed in keeping our contract time; but I should imagine that $15\frac{1}{2}$ or 16 knots an hour on the measured mile, with a vessel properly loaded to her load line, would not be too high a rate of speed to warrant the expectation of an average of $12\frac{1}{2}$ knots at sea.

1433. In order to keep up the average speed on the Indian side you consider that it would require a vessel to go faster at the measured mile than would be necessary to keep up that average on the other side?—Yes, that is so; our average speed on the Mediterranean lines from the 4th of January 1864 to February 1865 was exactly 10 knots per hour; during that time on those lines we performed 352,000 miles, and the hours under weigh were 34,934, giving exactly 10 knots per hour. On the other side the average speed has been $9\frac{1}{2}$ knots.

1434. *Chairman*.] What estimate do you make in calculating the contract for the expense of the mail agents?—The conditions of the tender usually state, that we are to carry mail agents; but I do not think that that has ever been regarded as so important a matter as to necessitate a separate calculation of what the cost is; we should be very glad, of course, to have the use of the mail agent's cabin at all seasons of the year, but it is only in our very crowded seasons that his cabin would be of very great value to us;

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we give him a comfortable cabin, but of course not one of the largest.

1435. It would be inconvenient in that respect, would it not, if you had to find accommodation also for a Post Office establishment of sorters?—That, no doubt, would form an element for consideration in the matter of subsidy, and a very considerable one on the other side.

1436. With regard to notice you are at present under 12 months' notice, are you not?—We are.

1437. And you have power to give notice to the Government if you please?—Yes.

1438. And the Government have the power of giving notice to you?—Yes. Perhaps I may be allowed to observe with reference to that, having heard what Mr. Frederick Hill stated the other day, that we are not only in that position at the present time, but we have been so on many other occasions; and, if I may be permitted to say it, we have never taken any advantage of that position. The observation, I think, fell from a member of the Committee, that to a certain extent the Company had the whip hand of the Government. I can only confirm what Mr. Hill said, that although at certain times we had been in that position, the Company had never exercised power in that way, but had always behaved with great liberality.

1439. Probably the meaning of the expression was this, that the Government could not put any pressure upon the Company for fear of the Company giving them notice and terminating the contract?—That feeling may have existed; but if any alarm has been felt, I do not think that they can point to any case to afford ground for uneasiness on that score. On the contrary, we could adduce cases in which we have abstained from giving notice when it would have been advantageous to us to do so.

1440. You have stated some of the practical difficulties which result with regard to the junctions of lines; for instance, that there is an inconvenience in the Mauritius passengers coming in upon the crowded steamer at Aden; would not that inconvenience be very much augmented if, on the establishment of a weekly mail from Bombay to Suez, the Australian and the China mails were made to fit in with that line at Aden?—It could hardly have been, I fancy, seriously contemplated to bring about a junction of a number of lines at a place like Aden. I do not think that plan would bear much examination.

1441. Probably you are of opinion that the establishment of such a line as that, having regard to that fact, ought to be wholly separate and distinct from any other line of service?—I think so. If it is to be carried on in such a manner as I understand the Committee to desire, as a sort of express postal line, any junctions of that kind would entirely do away with the advantage to be obtained from it.

1442. Do you make much use of the telegraph in communicating with your agents abroad?—Yes, we make considerable use of it, but we depend a good deal with regard to the movements of our vessels upon information that comes to us in

other ways. For instance, this very morning we have become aware that there are telegrams from Australia in London, and that indicates to us, that our vessel from Australia reached Point de Galle on the 16th of this month, that is the day she is due there. If anything like a serious accident occurs, our agents immediately telegraph to us, either for instructions, or inform us what has taken place.

1443. Practically, the existence of that communication is of use to you on some occasions?—Of very great use. I would not go so far as to say that it has been the means of preventing an obstruction of the mail service; but it has been of very great assistance in meeting exigencies which have arisen through accident, or perhaps the loss of a vessel. In the case of the "Jeddo," which we had the misfortune to lose the other day, near Bombay, the message came to us very quickly and in very good order, with rather full particulars; we were enabled upon that to telegraph to our agent at Suez, who was in ignorance upon the point, and to give him instructions what to do with certain vessels which were at that time there. We were also enabled to telegraph to Calcutta, and set the Calcutta agent in communication with the Bombay agent, with regard to the future movements of the mail steamers.

1444. In fact, your agent at Suez learnt the loss of the "Jeddo" at Bombay, by means of a telegram sent from Bombay through the Persian Gulf to London, and a further message sent by you in London to him through Alexandria?—Yes.

1445. You would miss enormously, would you not, the present means of communication, if anything occurred on the Continent to interrupt it?—Yes; it would be an inconvenience to us. With regard to our general service, perhaps it is scarcely known that the arrival of one of our mails in England involves the performance of no less than 17,598 miles. For instance, I find from a statement which I hold in my hand, that the last China, Australia, and Calcutta mail which was delivered in London was conveyed by one steamer from Yokohama to Shanghai, 840 miles; from Shanghai to Hong Kong, 800 miles; from Foochow to Hong Kong, 510 miles; from Hong Kong to Point de Galle, 3,031 miles; from Sydney to Point de Galle, 5,200 miles; from Calcutta to Suez, 4,757 miles; and from Alexandria to Marseilles, 1,478 miles: making altogether 16,616 miles, by seven separate steamers. From Suez to Alexandria, the land journey is 248 miles, and from Marseilles to London, 734 miles. Then the heavy portion of the mail is delivered at Southampton by another steamer, making eight in all, and the mail traverses, to reach London, 18,417 miles, employing eight steamers to effect its final delivery. That indicates the very difficult nature of the service which we have to perform, and also the difficulties which might be created if any disjuncture of those services took place. It is a matter to be approached with very great consideration. I am not speaking as a contractor receiving subsidies, but as to the risk of dislocation of the postal service.

Tuesday, 24th April 1866.

MEMBERS PRESENT:

Mr. Ayrton.
Sir Charles Bright.
Mr. Childers.
Mr. Crawford.
Mr. Laird.
Mr. Marsh.
Mr. Moffatt.

Lord Robert Montagu.
Sir Henry Rawlinson.
Admiral Seymour.
Mr. Stansfeld.
Mr. Turner.
Mr. Weguelin.

ROBERT WYGRAM CRAWFORD, Esq., IN THE CHAIR.

CHARLES WELLINGTON HOWELL, Esq., re-called; and Examined.

1446. *Chairman.*] HAVE you any corrections to offer to the Committee with respect to any parts of the evidence which you gave the other day?—I would beg permission to correct some parts of the evidence which I gave; I have only had this moment put into my hands the proof copy of it, and have not had time to read it through; but I believe I made a mistake with regard to the total number of steamers of the Company. In the list which I quoted there had been added by mistake some sailing ships and store ships that we have, and I think that I gave the number as 66; whereas the total number of steamers is 57, and the tonnage of the steamers 84,176 tons. The horse-power is, as before stated, 19,230. I would also ask leave to add something with reference to the speed of the Cunard steamers. I gave by mistake the average only of the Boston line; now the Boston line shows a lower average rate of speed, and, of course, I would desire to be correct in this matter. The average rate of speed upon the New York and Liverpool line for the three years which the Parliamentary Return comprises, namely, the years 1859, 1860, and 1861, later than which we have nothing to go upon, comes out at 10 knots and 5 fathoms. I gave only the average speed upon the Liverpool and Boston line, which appears to be 9 knots and 7 fathoms.

1447. Have you prepared a mileage table of the services performed by the Peninsular and Oriental Company's shipping, under their India and China contracts, for the year 1865?—The table which I have before me comprises the whole of our India and China work (*delivering in the same*).

1448. What was the whole number of miles run by your ships in the performance of the China and Calcutta service in the year 1865, separating that from the Bombay line?—The mileage of the Calcutta and China service appears to be 668,544 miles.

1449. And the Bombay service?—The Bombay service was 355,248, making a total of 1,023,792 miles.

1450. Have you any *pro formâ* mileage table of the number of miles that would be performed if the service between Bombay, Madras and Calcutta were omitted, and a weekly line of packets

were established between Suez and Bombay in lieu of the present fortnightly service?—I understand you to mean a weekly service involving 52 voyages per annum; that would produce a total mileage of 1,147,900 miles.

1451. How many miles would that be in excess of the existing service?—One hundred and twenty-four thousand one hundred and eight miles per annum.

1452. Have you got any *pro formâ* mileage table of the weekly service to India *viâ* Bombay, and the weekly mail to China from India *viâ* Bombay and Calcutta alternately?—A weekly service to and from Southampton and Marseilles and Bombay, including 104 voyages, would produce 769,704 miles per annum; the China line, worked in the manner you describe, between Bombay and Shanghai, a distance of 4,742 miles; between Calcutta and Shanghai, a distance of 3,887 miles; the total number of miles being 8,629; and 52 voyages per annum at that rate would produce 448,708 miles, making a total of 1,218,412 miles.

1453. Mr. Childers.] Then if the service which I indicated in my question the other day were carried out, that is to say, only a four-weekly service to China, that mileage would be reduced, would it not, to 958,802?—That would reduce the distance by the half of 378,196.

1454. But the Australian service is now once a calendar month?—Yes.

1455. Therefore, if the other services were once in four weeks, would not that add one Australian service in the year?—It would.

1456. Can you give us the mileage of one Australian service from Galle to Sydney and back?—The distance from Galle to Sydney is 5,200 miles, and it would be double that, 10,404 miles.

1457. Therefore, on such a service there would be 189,098 less mileage to China, that is half the mileage you have given, and 10,400 more mileage to Australia?—Yes; if it followed, as a matter of course, that the Australian service were increased to 13 voyages a year in lieu of 12; if it were not so increased of course some detention of the mails would arise at Galle.

1458. If you had a four-weekly service to China, and Galle was the point at which the

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China service touched practically, you must have a four-weekly service to Australia, must you not?—Yes; the Australian community would, no doubt, demand it; they would not like their mails to wait.

1459. Therefore, the result of such a service as I have indicated would be a diminution on the total mileage of your first year of 178,698 miles?—Yes, it would.

1460. Mr. *Ayrton*.] Having regard to the convenience of the Australian people having a fortnightly mail instead of a monthly mail, and, perhaps, having some economy resulting from the new accommodations, do you think it would answer their purpose to join the service at Singapore, instead of going to Point de Galle from Sydney on the other side of Australia?—We have had practical experience of working the Singapore route, and we very soon found it necessary to give up that line. There has been a project lately of bringing up an Australian mail from Queensland to Singapore, with the idea that it would, with the present line, form a fortnightly communication with England; but if that mail is brought on from Singapore to Point de Galle by our China steamers, the two mails would arrive concurrently at Point de Galle, and they would both come on to Suez in one steamer.

1461. You mean that they would get to Point de Galle as soon as they would to Singapore?—It would work this way: either they would have to despatch the two mails from Sydney at the same time, or to start from Sydney at intermediate dates; in the latter case the two mails would arrive at Galle at the same time; in the former case they would reach Galle at intermediate dates; either one thing or the other would be the result.

1462. But supposing the plan were adopted, as has been suggested to you, of having a weekly mail to China by connecting at Singapore at comparatively little expense, they could have a weekly mail to Australia, could they not?—I think the result would be somewhat like that which is complained of at Calcutta, that although they would have four communications they would have only two mails.

1463. There would be a loss of time in the Calcutta case?—There would be a loss of time by the Singapore route, from the circumstance that the two mails would arrive in and from Australia almost at the same time.

1464. If instead of going direct to Singapore you touched and took in the mail as you do now at Madras, there would be an increase of the whole sea route to Calcutta; would there be any loss of time as regards England?—Do I understand you to propose to bring the mail from Singapore to Madras.

1465. Supposing that the Calcutta mail, the one that did not start from Bombay, but from Calcutta, touched at Madras the same as they do with the English mail, would there be any loss of time in the Australian mail coming to England and going from England?—I think, speaking without having considered the matter carefully, that Madras would be a port altogether out of the question for a terminal port, or a port of junction for the mails.

1466. Supposing the mails started from Calcutta alternately and from Bombay, and that the Calcutta mail was retarded a little; but supposing the English mail were taken in outwards or homewards and delivered at Madras, then would not the mail from Australia arrive in England

as quickly by that route as it would if it went through Galle?—I think not. I think that a considerable increase of distance would be involved, and also an increase of somewhat difficult navigation; and again, the port of Madras presents no facilities whatever for the transshipment of mails and cargo. Point de Galle is not a very convenient port; but Madras would be still less so.

1467. Madras must have facilities of a sensible kind to induce you to use it for 20 years for the shipment and delivery of mails?—It is only a very small portion of the mails that is delivered there. The transshipment of the Australian mail is a very heavy matter.

1468. Still, you never experienced during the years you have touched at Madras any difficulty in landing passengers or mails?—I should not like to say that. I think I could find many cases in which the vessels have had to put to sea or to remain at sea for some hours, not being able to approach sufficiently near to effect a transfer of the mails and passengers. That does not occur so frequently now as formerly.

1469. During the last five years has it occurred in your recollection?—I have no recollection of a particular case.

1470. Mr. *Marsh*.] Carrying the mails 13 times a year instead of 12 would not cost 1-12th more; your ships would be the same and the crews would be the same; the only difference would be the wear and tear of the ships, and the coals consumed in the voyage, and instead of stopping a calendar month at Sydney it would stop a lunar month?—But the effect of such an arrangement might be to increase the number of ships that would be required upon the line.

1471. Do you think there would be necessarily an increase?—That is certain; for if the line could be worked, for instance, with three ships for 12 voyages in the year, it would require at least four to work 13.

1472. But on the Australian line the ships would only stay a lunar month instead of a calendar month, which would be quite long enough?—Yes; but the difficulty would be felt more at Galle. We make Sydney the terminus of the line, bringing the steamers up to Galle, and turning them round, we should find, because we have gone into that, that three ships would not do the work.

1473. Mr. *Ayrton*.] Have you seen the papers that were laid before Parliament, relating to the establishment of a line of steam transports between England and India?—I have seen them.

1474. Are you aware that upon those papers it is proposed by the Government to establish steam transports running between Bombay and Suez of a very large capacity and of great speed, I think about 4,000 tons, and a speed of about 15 knots an hour?—Yes, I am generally acquainted with those circumstances; I know that such ships are being built.

1475. Are you aware that it is contemplated to carry in those vessels all troops passing between India and her Majesty's possessions in this country?—I believe that that is the course proposed by the Government.

1476. Will that line, do you expect, have much influence upon your own passenger traffic?—I should imagine that it will have some influence.

1477. Can you state the number of military officers that you convey between the three Presidencies and Suez?—Yes; I have a return here showing

showing the number of first class passengers conveyed to and from India and China (that is to say, Bombay, Calcutta, and China) by the steamships of the Company during the year 1865, distinguishing officers of the army and navy and Government officials. I find that on the outward route we had 84 officers of the army, 45 officers of the navy, and 12 civil servants of the Government, against which we conveyed 269 ordinary passengers. But I should state that the numbers that are given as the numbers of officers of the army and navy only comprise those who come to us with an order from the Government to provide them with a passage, referring us to a Government department for the payment of the passage-money. It is quite possible, in fact, I know it to be the case, that a portion of the 2,996 passengers were also officers proceeding under Government orders, but who were, perhaps, furnished by Government with a certain amount of money to provide their passage either by the Cape or the overland route as they pleased, and they came to us and took their passage.

1478. Have you any idea how many persons there are, independent of orders, that pass backwards and forwards?—It is somewhat difficult to compute that; I would have made the return to comprise that information, but it was found so difficult on making the attempt, that I was obliged to confine it to those officers who presented Government orders.

1479. Can you form any general estimate as to the proportion, whether it is one-third or one-fourth?—I should think fully one-fourth. The number of officers of the army travelling under Government orders homewards was less than that outwards; there were 23 military officers, 48 naval officers, and 13 civil servants of the Crown, against 2,012 ordinary passengers. There is an order still extant, I believe, that the officers coming home from India are as much as possible to go by the Cape of Good Hope; we felt very much aggrieved when it was issued by the War Office, because we had, immediately before, consented to an abatement of 15,000 £. from our subsidy on consideration of being relieved from having to carry on certain terms what were previously known as contract passengers; that is to say, we were under an obligation to carry a certain number of officers of the army and navy ordered by the Government at two-thirds of the rate charged to ordinary passengers. When India was annexed to the Crown, there was, of course, a very great increase in the number of officers travelling under those orders, and as we had never calculated upon the annexation of India to the Crown, the increase pressed very heavily upon us, and the system became very inconvenient in all ways; it brought the ordinary passengers and the Government passengers into conflict, in the matter of fares. The result was our consent to receive 15,000 £. a-year less for our subsidy on being relieved from carrying those officers at reduced rates. Immediately after this was done, the War Office issued an order to the authorities in India stating that, as the Peninsular and Oriental Company no longer made reductions in their favour, all officers were to go by the Cape. Of course we put in a protest against this, but the deduction of 15,000 £. per annum has been made nevertheless up to the present time.

1480. Do you think that the establishment of this line of transport will withdraw many passengers from your own vessels?—I think it must

withdraw a number; perhaps some considerable number; but we find that there is a great deal of elasticity in the passenger part of our business, and we do not look forward to it, I think, with any great alarm.

1481. Do you think, that instead of having the opposition of those powerful vessels carried on by the Government, the work that they are to do was brought in aid of your contract service, you could have a much more efficient service at a less price?—I am hardly prepared to speak as to what might have been the cost; but our opinions on the matter are embodied in a letter, addressed by myself, to Sir Charles Wood, on the 20th of June 1863, at page 28 of the papers presented to the House on the 27th of March 1865, on the subject of Steam Transports, England and India; and perhaps the Committee will allow me to read it to them. "122, Leadenhall-street, London, 20th June 1863. Sir,—The directors of this Company having observed, by a Report of Proceedings in the House of Commons, that Her Majesty's Government have under consideration an arrangement for the transport of troops to and from India by the overland route; and having had extensive experience, both in respect to travellers generally, as well as to troops in transit by that route, trust they may not be deemed intrusive in submitting the following suggestions and proposal for your consideration. During the Indian mutiny, and between the months of September 1857, and June 1858, 235 officers and 5,171 men were transported to India by this Company's steamers; and notwithstanding the disadvantages under which the service was performed, the mail contract vessels not being fitted up as transports, the men were landed in excellent health, and without being subjected to any hardship. The experience thus obtained proved, that with a properly organised transport system, there would be no difficulty during the fair season, extending over seven months, in conveying troops overland, to and from India, with less detriment, morally or physically, than they now suffer from the long sea voyage *viâ* the Cape. The advantages of the overland route have already been recognised by the French Government, who now send reinforcements for their army in Cochin China, and bring back their invalids in the same manner, and it is known that they have fewer casualties and less sickness than if they were sent by the Cape of Good Hope. The directors of this Company would be prepared to tender for the conveyance of troops for the through voyage between England and India; but should Her Majesty's Government decide upon performing the service to Alexandria and the transit through Egypt, they would be ready to contract for the service between Suez and India only to be performed by screw steam-transports of 2,000 tons, specially fitted up and set apart, and capable of carrying from 600 to 800 men each. At Suez the Company has a hulk of 2,000 tons moored in the roadstead, capable of accommodating 800 men, where, in the event of the detention of the steamers, the troops could be lodged, and where they would not be exposed to the temptations of the Suez grog shops and the deleterious spirits sold in them. For communication between the shore and roadstead, a distance of about six miles, there is a steam-tug of about 150 tons belonging to the Company. The directors would be willing to undertake this service on moderate terms;

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but to enable them to estimate what these terms should be, it will be necessary that they should be informed on the following points: 1st. The estimated number of troops that will be sent out to and return from India annually, and the probable number that will embark in each transport. 2. The ports of embarkation and disembarkation in India, and the probable number of troops at each. 3. Whether arrangements would be made that the transports bringing troops to Suez should carry back from thence the reliefs from England, as it would greatly add to the cost of the service if the transports made a voyage either way empty. From the complete organization of their establishments in Egypt and India, and the means at their disposal, the directors are confident that they could undertake this service under more favourable conditions than any other parties; but should Her Majesty's Government determine that it is not to be performed by private contract, but by Her Majesty's transports, they will be ready to render every facility and assistance through their agencies abroad. I have, &c., (signed) C. W. Howell, Secretary."

1482. Have you ever been asked to make an estimate of what you would perform the service for, in conjunction with your mail service?—When this proposition was made it was not intended, I think, to bring the transport service into conjunction with our mail service. We expressed our willingness to undertake the transport service, being aware of what the Government contemplated, and I may mention that we never received an answer to this letter.

1483. Then you have never had an opportunity of considering the question officially, whether you could combine the mail service and the transport service, and by bringing all the resources of the State to bear upon such a service make it more rapid and more efficient?—I fear that many practical difficulties would arise in any attempt to combine or alternate the two services. I should imagine that it is the intention of the Government only to send troops at certain seasons of the year. They would naturally, I think, avoid what might almost be called the dangerous seasons of the Red Sea, when the heat is so great that the health of the troops might become affected, even in a short time, owing to the number of passengers in one vessel. I also believe it is the intention of the Government that those vessels shall be also employed in other ways; in moving, perhaps, a regiment to Australia or New Zealand and back, at the season of the year when they are not required for the transport of the reliefs to and from India. A difficulty would arise, perhaps, in procuring the embarkation of a regiment or half a regiment, on a particular day in the week, as would have to be done to give the service the regularity of a mail line.

1484. Do you apprehend that there would be much difficulty in that if the railway system were complete in India?—The existence of the railway in India would probably much facilitate the matter; but in the present state of the railway through Egypt, there would, perhaps, be difficulty; as it is, we find that there is quite enough for one line of rails to do to carry through our cargo, passengers and mails, and to get away from Alexandria or Suez in proper time, and if a vessel arrived at Alexandria with 500 or 800 troops on board, in addition to mails, passengers, and cargo, I am afraid that great confusion might result.

1485. That would involve the starting of two

trains instead of one?—At present there is but a single line; but we hope there will be a double line soon.

1486. There is but a small amount of rolling stock in that single line?—I think they have as much rolling stock as they can use on a single line of rails.

1487. Have you had much experience of the cost of keeping vessels laid up in India, or on the other side of the Suez, unemployed?—We very rarely have a vessel laid up; never, I may say; we have always full employment for our ships, and if they are laid up they are laid up for repairs, or in consequence of accident; we never have an idle vessel.

1488. Is it a very costly business, keeping a vessel on the other side of Suez unemployed?—It would eat into a great deal of money, as a ship must be well cared for. Fouling goes on very rapidly, and that would necessitate docking.

1489. If you had to make a contract to convey troops at certain periods, leaving your vessels unemployed for a considerable period of the year, you would have to enhance the cost very materially, would you not, to meet that contingency?—Yes; naturally that would form a large item in our calculation of expenditure.

1490. So that such a system as that would seem to be rather an expensive one as compared with the more active system of conveying the troops regularly?—That is what we contemplated in this letter that I have just read. In the course of the mutiny we carried a great many troops on board our passenger vessels; but it is not a thing which can be conveniently done as a practice. We had to ask the forbearance of our passengers, and, as the emergency was so great, we were met in the most liberal spirit by all; but the conveyance of troops and passengers in one vessel is not at all a desirable thing.

1491. Your vessels are not 4,000 tons burthen?—They are not, but some of them are very large roomy vessels.

1492. Have you any large accommodation for second-class passengers?—Yes, in our more recently built vessels we have considerable accommodation for second-class passengers, indeed, in every vessel that we build, we are extending the accommodation for that class. The construction of railways in India makes it necessary that a large number of passengers, who cannot very well travel first class, and take their meals at the saloon table should go as second-class passengers. The Railway Companies told us that they must send them out, and if we could not take them second class they must send them first class, it was not a money question with them, they were compelled to have the people out; our arrangements for second-class passengers were perhaps at first governed a good deal by the circumstance that a number of artisans would be constantly going to and fro, now we are carrying a number of general second-class passengers, people who cannot well afford to pay the first-class rate.

1493. Do you find that the whole expense of your steamboats increases in the ratio of their tonnage?—I do not know that.

1494. Do you know whether the expense increases generally in the ratio of the tonnage, or whether the ratio of large vessels is more favourable than that of smaller ones in the east?—Speaking without any data I should imagine there would be but little difference; of course, if anything goes wrong with the machinery of a large

large vessel, if a shaft breaks, it is more difficult to replace it or to get a new shaft out from England, than it is in the case of a small vessel. I should imagine that the ratio of expense would be against the large vessel.

1495. Have you any accommodation at Suez for repairing vessels?—No, we do not make Suez a repairing port; the French are doing a great deal there. Bombay is our chief arsenal.

1496. Did you many years ago appeal to the British Government to intervene with the Pacha of Egypt, to get proper dock accommodation at Suez for your service?—We have at different times brought to his notice the desirability of having dock accommodation there.

1497. Have you ever got anything done?—The Pacha has ceded land to us, and we should, perhaps, experience no difficulty in obtaining permission to build a graving dock at Suez, but that is a very costly affair, and if the French have one there we should no doubt have an opportunity of using it if we required to do so.

1498. Did you ever succeed in obtaining the concession of liberty to make docks at Suez from the Pacha of Egypt?—I do not remember that we ever asked permission to make docks; we asked and obtained permission to do other things there. We are constantly extending the facilities of the place; in fact, Suez has become very greatly altered during the last few years.

1499. Did the French company, as soon as they got their concession from the French Government, in a few weeks obtain a concession from the Egyptian Government to establish docks?—Yes, they did, because the French contemplate making Suez a grand terminus of their Indo Chinese line, and at a terminal port dock accommodation is essentially necessary.

1500. Have the French company obtained the right of applying any of the money charged by the Pacha for the transit through Egypt towards the construction of docks for some years to come?—I am not aware what the nature of the arrangement is, or how they expect to be repaid for those docks.

1501. Are you aware that they have a special contract with the Pacha of Egypt with regard to the appropriation of the charge for the transit through Egypt?—No, I am not; the only part of the arrangement with respect to the transit that I know about is this: that our arrangement with the Pacha is the same as with the French, namely, to carry first-class passengers through at the same rate per head, and so on.

1502. The charge to you and to them being exactly the same, are you aware of this difference, that you pay it and that they do not, but that they apply the money towards the construction of their docks?—No, I was not aware of that; I never heard of it.

1503. Mr. Childers.] You stated, did you not, that if you contracted for the transport service between Suez and India, you would not convey the troops in the same ships as you carry your mails and passengers in?—I do not think I can say that we have gone very far into this matter. The letter to Sir Charles Wood embodies all that we thought about it at the time. When we found that the Government had it in contemplation to undertake the transport of reliefs to and from India *via* Suez, it appeared to be a matter which would very well come within the range of our charter and our general operations, and, therefore, we signified to the Government that we

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should be ready to entertain the question of undertaking it; but we have not gone very far into the subject.

1504. You stated, did you not, that it would be very inconvenient to carry troops in the same ships as passengers?—Generally speaking, we have no room for them. We now and then carry a few troops between Galle and China, because the vessels get relieved of many passengers on that line, and we have room; we have occasionally taken 40 or 50 men at a time; but it has been almost in the sense of obliging the Government.

1505. You are aware that now the practice is, whenever it is possible, to send a whole regiment or a whole battalion in one transport ship?—Yes, I believe so.

1506. You could not, by any possibility, convey a whole regiment or a whole battalion in a passenger ship between Suez and Bombay, could you?—Certainly not, in any one existing passenger ship; and, probably, the officers in such a case would be accompanied by their wives, and in some instances by their children and servants.

1507. Supposing that the Government considered it the most advantageous plan to convey whole regiments or whole battalions at a time from England to Alexandria, or back, in connection with the Indian reliefs, you could not, practically, convey those regiments, could you, for the rest of the route between Suez and India in your passenger ships?—Certainly not.

1508. Therefore, you would have to put on special ships for that purpose?—Yes, that was what we contemplated when we wrote that letter.

1509. And in putting on those special ships they would only be employed in that service during the period of the year in which troops could be conveyed?—Yes, I think that is the correct view of it.

1510. Are you aware that it has been decided, upon undoubted principle, that troops ought not to be conveyed to and from India except in the cool season of the year?—That, I should imagine, would be the course adopted by the Government. Our experience on that point would go to show that that would be the proper course.

1511. Therefore, unless you had some other employment for those ships, you would be put to the same expense as the Government would be put to unless they had some other employment for their ships?—Yes, they would be lying idle, unless at those seasons of the year when the conveyance of troops by the Red Sea would be inadvisable, those same vessels could be employed in moving of troops, perhaps, to Australia or New Zealand, or in other ways.

1512. But if it was in your hands, would not that be just the season of the year when you have the least employment for your ships?—Yes; we should be very glad sometimes to be relieved of the obligation of regularly despatching the steamers, and that is always to be borne in mind with regard to our mail service. There are seasons of the year in which it is really a loss to us to dispatch a vessel with mails; we have few passengers and little cargo, and we should be very glad to lie by for a time.

1513. So that if you had a contract for the transport service, as well as for the mail service, it would add to your difficulty, having a large number of unemployed ships in the hot season of the year?—It would.

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1514. The Government, on the other hand, having the Australian and other services to conduct, might be able to employ their ships in that season?—Yes, but if the Government had thought fit to come under any arrangement with the Company with regard to the transport of troops, that arrangement between the Government and the Company might have included the transport of troops to Australia and to other parts.

1515. Mr. Ayrton.] You mean that you would have shifted the vessels?—Yes.

1516. So that if you had to make a run for Australia you would put a large ship on the line for that journey, instead of putting it on the line to Bombay?—We might do so.

1517. Mr. Marsh.] You might arrange that, might you not, by getting your ships docked at the time when they were not wanted?—The docking of a ship for cleaning is a process of only three or four days; but the docking of a ship for repairs is another matter.

1518. You stated that your ships are not very well suited for carrying troops; you have cabins for first-class passengers, both fore and aft, have you not?—Yes, we have; most of our vessels have one flush deck.

1519. That, in fact, gives no accommodation for second-class passengers or for troops?—The foremost part of those vessels is appropriated to second-class passengers on the same deck. I can give the Committee a rough idea of the proportion. For instance, one vessel, the "Poonah," on the Southampton and Alexandria line, has accommodation for 139 first-class passengers and 50 second-class. The "Pera" has accommodation for 119 first-class passengers and 34 second-class.

1520. Mr. Childers.] Reverting to the question which was asked you a short time ago, you do not think that your loss on account of the non-employment of transport ships in the hot seasons, supposing that you had a transport contract, would be greater than the loss which the Government would sustain?—I think not.

1521. Is it the case that you can turn a passenger ship into a transport ship without any serious inconvenience?—It is a work of some time and trouble; the requirements of the authorities of the transport department are rather peculiar, and, no doubt, if a vessel had to be employed frequently or permanently as a transport, they would require something very different in arrangement to the internal fittings of our vessels for general passengers.

1522. Are you aware that some years ago there was an inquiry by the House of Commons into the transport system?—Yes, I am.

1523. And that the result of that inquiry was a series of recommendations to improve the character of transport ships?—I did not see the papers.

1524. You are aware, probably, that the House of Commons recommended that the transport service should be conducted by the Government?—Yes.

1525. My question pointed to this: Could you conveniently, considering the fittings and arrangements of a passenger ship, on the other side of Suez, convert that ship, without great expense, into a transport?—It would cause a great deal of expense and much temporary inconvenience.

1526. So that the only possible way in which you could conduct a permanent transport service would be by having an establishment of trans-

port ships?—We had some vessels which were not meeting all the requirements of the mail and passengers at that time, and, in making this proposition, we thought we could devote them specially to the transport service.

1527. Would those ships be accepted by the Transport Department?—As regards their strength and the general requirements which I believe the Government wish fulfilled when they accept a transport, such as Messrs. Wigram's or Messrs. Green's, they would probably have been accepted; but, as to the mode of internal fitting, I cannot say that we should have had vessels adapted to their special purposes.

1528. But, considering the improvements which Parliament has thought fit to carry out in the sanitary conditions and comforts of the soldier, do you think that those ships would be accepted at the present time for the Red Sea service?—Probably not. I observed in the paper which Mr. Ayrton has before him, that one vessel, the "Himalaya," a vessel which was built by our company, and purchased by the Government, is referred to as a perfect vessel as a steamship; but as a "make-shift," as a transport, notwithstanding the great number of troops she has carried at different times to all parts of the world.

1529. Has she carried troops in the Red Sea?—I think not up and down the Red Sea. I do not remember that she has ever been to Suez, but she has carried troops to and from India.

1530. Is it not the case, that carrying a battalion with women and children and officers in the Red Sea is a very different matter to carrying a battalion from this country to America?—No doubt. I have heard that the French have suffered on one or two occasions, from having rather more troops on board their vessels than was safe in the hot season.

1531. So that you would have practically to build a fleet of transport ships, if you had a contract for that service?—Looking at the length to which the matter is now being carried by the Government, and to their intention to send backwards and forwards the whole of the reliefs of the Indian army, I do not see how the case could have been met otherwise than by the construction of a special fleet of vessels.

1532. And if you had such a fleet of special vessels adapted for some other than the mail service, would you not have to add considerably to your contract; because, in the event of its coming to an end, those ships could only be used as transport ships?—I do not know whether we should have looked forward to the probability of the contract coming to an end; we have some confidence that the communication with India must be an enduring thing, although modifications or alterations may be introduced into it.

1533. You think that your position in the East is such that you may look upon it as nearly permanent?—We are not looking forward to being sold up as it were.

1534. And probably getting this contract would add still more to this permanency?—Undoubtedly. I think anything that would increase what has been sometimes called our monopoly there, but which we say means our power to do the public work at low rates, would add to this permanency; it has been the possession of a large fleet of ships and dockyard establishments which has enabled us to do the public work cheaply.

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1535. So that if it were not the policy of the Government permanently to establish that monopoly, they might be wise in not giving you the transport service?—That is one view of it, certainly.

1536. Mr. *Ayrton*.] Do you think that the public will continue to be satisfied with your conveying the mails under your 10-knot agreement, when the Government run those ships, at the same time, at 15 knots an hour?—I do not look forward to the Government running those vessels at 15 knots an hour. I think I saw something about 15 knots an hour, or 14 knots an hour, but it was at a measured mile, and with a view to the attainment of 8 to 10 knots an hour at sea.

1537. *Chairman*.] There is a paragraph in a letter from the Director of Transport Services to the Secretary of the Admiralty, dated 6th October 1864, in which he states, "On referring to the Controller of the Navy he stated that the vessels should be capable of carrying 13 days' fuel for a rate of 14 knots, which rate will enable them to give a fair average of from eight to 10 knots;" what is your opinion with regard to that?—I should understand the 14 knots to mean a trial rate of speed.

1538. Mr. *Ayrton*.] Are you aware that ships are built by contract, to run 15 knots at the trial mile?—Yes; I believe there are some few such vessels.

1539. The contract is that they shall run 14 knots at the trial mile?—Yes.

1540. Your vessels are only constructed to run 12 knots, I believe?—Yes, 12 knots was our trial rate, but we exceeded that in most cases; we are not now under the obligation of testing them in that way.

1541. The Government having those powerful vessels, and having troops on board, do you think they will not employ the speed that they can run at between Suez and Bombay?—Considering that a high rate of speed always involves a very great increase of expenditure, I should imagine it more likely that they will go at a moderate rate of speed. It may be very useful for them to have the power of going at a high rate of speed in case of emergency. I can understand that; but if they are merely moving troops, as reliefs, backwards and forwards, as reliefs, I should question whether they would go to the expense of the great consumption of fuel which would be necessary to attain such extreme speed.

1542. Can you answer the question which I put to you, as to the per-centage of your expenditure upon fixed establishments in India, with reference to your expenditure afloat?—I have a paper here which I think will give the Committee some information upon that point. I brought it with me, thinking it might be of interest, and it partly answers the honourable Member's question. It exhibits the amount expended on the repairs and renewals of the steamships of our fleet during five years from 1861 to 1865 inclusive. In 1861 we expended in repairs and refits 292,442 £.; in 1862, 355,258 £.; in 1863, 359,917 £.; in 1864, 361,480 £., and in 1865, 294,459, making a total expenditure in repairs, only for five years, of 1,663,556 £., or an average of 332,711 £.

1543. Could you give us any idea of the expenditure on the vessels afloat. I am not speaking of the provisioning of the passengers, but the

expenditure in keeping up the vessels afloat?—If you mean the cost of running them, the coal expenses, and so on, I am not so well prepared to answer that question.

1544. That expenditure is made at several establishments in different parts of your system, is it not?—Yes; it exists at all times; it is a chronic state with us; we have always two or three large ships under heavy repair, and receiving new boilers.

1545. And for those purposes you find it necessary to have fixed establishments at several parts of your line of communication?—Yes.

1546. Then the Government, if it is to establish a line of transports, would have to do the same, and keep up establishments?—No doubt.

1547. And if the Government vessels are as large as 4,000 or 5,000 tons, those fixed establishments would be more expensive in their character than yours for small vessels, would they not?—Yes, they would.

1548. And they would have to keep up those establishments in addition to yours?—It is possible that they might come to the Company for facilities of docking, and so on; in fact, I think it is more than likely. There have been communications, not official, but conversations have taken place and inquiries have been made with a view to some arrangement for our meeting some part of the Government requirements, in the supply of coals and of provisions at certain stations.

1549. *Chairman*.] What docking facilities have you?—Our chief docking facilities are at Bombay, Calcutta, Hong Kong, and Sydney; we have no docks at any other port.

1550. What is the largest vessel that you can take into your dry dock?—The dry dock which we are now building at Bombay will take in the largest vessel afloat, except the "Great Eastern."

1551. Do you believe that the Government have any dock capable of taking in a ship of 4,000 tons burthen?—I have not the dimensions of the Government Dock at Bombay with me.

1552. Do not you find that the bottoms of your ships foul very much in the Eastern seas?—Very rapidly; that is one of the great difficulties that we have to contend against, and which confirms what I stated the other day, that the navigation of the Indian seas is not to be compared with that of the Atlantic.

1553. Lord *Robert Montagu*.] Are yours iron ships?—They are all iron ships.

1554. *Chairman*.] How often do you suppose one of your vessels, which goes constantly up and down the Red Sea, has to be docked to clean her bottom?—If she runs over nine or 10 months, especially at certain seasons, the fouling takes place very rapidly; the growth of grass is the same in water as on land; it is affected by the seasons; and if a vessel has not been docked for 12 months, we very soon begin to find out a great diminution in speed.

1555. Can you dock your vessels with similar facilities at Calcutta and at Hong Kong?—Yes.

1556. Have you a dry dock at Hong Kong also?—We have the use of a dry dock there; we have no dock of our own; at Sydney also we are obliged to provide docking accommodation.

1557. What sized vessel can you put into the dry dock at Hong Kong?—We put in our largest vessels; we have docked a vessel over 300 feet long at Hong Kong.

1558. Mr. *Laird*.] Are you aware that the Government have made a private arrangement

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with a private dock-owner at Hong Kong to alter the depth of his dock so as to take in the largest class man of war?—I was not aware of that arrangement.

1559. Mr. Childers.] Do you know how many feet over the sill you have at Hong Kong?—I do not think we have ever had any difficulty with regard to the depth of water; we docked the "Columbian" there; she has rather a large draught of water; I suppose her dock draught would be about 18 or 19 feet.

1560. Are you not aware that the Government arranged to increase the depth of Mr. Lamont's docks to 24 feet?—I am not aware of that; with regard to a question which was put to me by the honourable Member for Birkenhead the other day, as to the navigation of ships in the Indian seas, perhaps the Committee will permit me to say that I have brought with me a return showing the consequences of the transfer of vessels employed in the Mediterranean service to the Indian seas. I take the case of the "Mooltan," and I find that we got an increase in the consumption of coal of 1 cwt. 8 lbs. per mile, and a decrease of 1-8th of a knot per hour in speed. In the case of the "Ellora" we had an increase of 3 qrs. 25 lbs. (nearly 1 cwt.) in the consumption of coal per mile, and a decrease of half a knot in speed.

1561. Mr. Laird.] Can you state what the total consumption was for the mile?—In this case of the "Mooltan" I think it was 3 cwt., and it was increased to 4 cwt.

1562. Mr. Childers.] Are you aware that the Government transport service is only proposed to be between Suez and Bombay?—I was not aware of it until reading it in the Parliamentary papers last evening.

1563. Have you any doubt that the docking accommodation at Suez and Bombay would be practically enough for that service?—I think that the present docking accommodation might be found insufficient, because a vessel under heavy repair, will sometimes occupy the dock a very long time. It is an inconvenience which we are frequently subject to. We recently repaired and refitted the "Simla," a very large vessel at Bombay, and she necessarily occupied the dock a very long time to the exclusion of other vessels, which we should have been very glad to have put in for the mere purpose of cleaning.

1564. Considering the nature of the steamers that the India Office propose to employ between Suez and Bombay in the transport service, do you conceive that the docking accommodation is insufficient for them?—The present docking accommodation would probably be found inadequate to all the requirements that would arise in connection with a large fleet.

1565. I mean as to the Government dock accommodation?—I do not think I can answer that question.

1566. Mr. Laird.] Have the Government a dock of their own at Bombay which can hold those large transports?—There is a Government dock at Bombay, but I cannot speak to the capacity of it. I could procure the information; I have it at the office. I am told that the Government dock at Bombay could not take in the contemplated vessels.

1567. Some questions have been asked you about the docks at Suez, in which I understood the honourable Member to say, that the French

Company were to pay the same amount for the transit across the Isthmus as you were to pay, but that the money was to go towards paying for those docks; are you aware of that?—I was not aware of the manner in which the money received by the Pasha from the French Company is expended. We know how he spends the money which he gets from us; he has been buying steamers lately, providing a fleet of steamers for himself; and it all goes in that way.

1568. Do you suppose that the honourable Member is correct in his supposition that those docks when completed will belong to the Egyptian Government?—I am not aware that they have any hold upon them.

1569. If the Egyptian Government are paying for them by instalments to the French company, the object no doubt is in the end to get possession of those docks?—I am quite unaware of the nature of the arrangement.

1570. Should there be such an arrangement, and the dock became the property of the Egyptian Government, then it may be opened to your steamers, and to the Government steamers?—Yes, we look forward to having access to those docks, whether they belong to the Messageries Imperiales Company or to the French or Egyptian Governments; if a dock is not occupied, we generally find the means of getting permission to use it.

1571. Mr. Ayrton.] How much do you pay as the contract rate from Suez to Alexandria?—The charge is 4l. 10s. for a first-class passenger, including three cwt. of luggage. It has been much reduced within a few years; we used to pay at one time 12l.

1572. Do you know enough of the climate and circumstances of India, to be able to say how far the difficulties which you have hitherto experienced in an influx of passengers at one time, and a diminution at another, would be overcome by through communication by means of the railways in India?—No, I do not; we have endeavoured at different times to distribute the passenger traffic more evenly over the year; we tried it once, but without success, by reducing our rates of passage money at those seasons when passengers were most averse to travelling. We made a very considerable abatement in the passage money in what is called the hot season, but we could not succeed in distributing the passengers over the year.

1573. Are you aware of the difficulties that arise, to a considerable extent, in travelling to the ports from the interior of India, at some seasons of the year?—I have had no practical experience of that. With respect to the sea passage, I may mention one case: two years ago, the heat of the Red Sea was such, that notwithstanding we had the mails on board, the commander of the vessel was obliged to turn the ship round and to put her back over her course in order to produce a current of air through the ship, and to enable them, in fact, to breathe. That was an extreme case.

1574. Have you no means of creating artificial ventilation in your vessels to the east?—Yes, they are all fitted with punkahs, and we have been attempting to introduce some means of ventilation by air pumps worked from the engines, but it must always be borne in mind that with a temperature of the atmosphere of perhaps 100 degrees, the air, when set in motion, may appear to be cooler, but it does not produce much effect; then

then the temperature of the sea is very frequently over 90 degrees.

1575. But where the temperature of the external air is so very great the ordinary natural ventilation ceases, does it not, on board ship?—It does, in a great measure; and it frequently happens that at the hottest season of the year the wind is blowing up or down the Red Sea at about the rate the vessel is going; so that she is travelling through a perfectly stagnant atmosphere.

1576. Would you like to say that you have got a well-ventilated ship at all in your service between Suez and Calcutta, and Bombay, or, rather, a well-ventilated ship, suited to the climate?—We think that we have done everything to produce that result that can possibly be done, and I think we may claim to have done it as far as is practicable. I have no doubt that we should all feel it very inconvenient to be in a vessel at such a time. We know that the passengers lie about the ship; they leave their cabins and their berths, and have their mattresses brought on deck; but they do that as a matter of choice.

1577. Mr. Marsh.] You state that the consumption of coal in the Red Sea increases, and that the speed decreases; is not that partly owing to the heat of the water, which prevents the steam condensing?—That is one cause; and in addition to that, the coal that is burnt on the other side of Suez has, in all cases, suffered great deterioration, it becomes very dusty and friable, and the flues of the boilers are choked; then again we have a difficulty in procuring labour; in fact, it is all native labour in the engine-room; the work of firing the furnaces is all done by natives, and we have to employ about four men instead of one, and do not get the work so well done.

1578. The heat in the stoke-room is sometimes 150 degrees, is it not?—There are cases of such heat as that.

1579. That is almost too much, is it not, for any European?—It has the same effect as a Turkish bath; they perspire and drink a great deal; it is, of course, too much for some people. We have a considerable per-centage of engineers, and of our staff generally, on the sick list, and a consequent increase of expenditure.

1580. Mr. Laird.] Have you ever been on board the Cunard vessels?—I have not; I have not been much of a traveller myself.

1581. You give a much greater space, I think, than there is in any vessel running across the Atlantic, for the passengers in the cabins?—I think that our cabins are more roomy, as a rule, than those on board the vessels that run across the Atlantic. The individual passenger has more space.

1582. Therefore you cannot carry so many passengers as they can in those Cunard vessels?—On one or two occasions we have had vessels in our service fitted on the Atlantic model, and we have found that they are totally unsuitable for our route; a flush deck, with cabins on each side, so as to get a good current of air through the ship, is what we require; the deck-house plan is altogether unsuitable for our purposes.

1583. When you have bought other vessels have you generally had to take down the cabins and to alter them?—We have had to refit them entirely according to our own plans; but we have not done that until we have found them to be unsuitable for our purposes.

1584. Admiral Seymour.] With regard to coals at Suez, is there any chance, in your opinion, of the coals being cheaper owing to the French being able to make their canal?—If the canal became available for the transport of coals, it would perhaps have some effect, but we are looking forward to some reduction in the cost of coals at Suez when conveyed by rail. In the return which I put in the other day, the actual cost of our last transport of coal across the Desert was 28s. Our chairman has been in Egypt within these six weeks, and one of the things which he hopes he has arranged with the Egyptian Government is some reduction in the cost of the transit of coals; but there is only a single line of rails, and the traffic of that line is so great that we cannot expect any great reduction at present.

1585. With regard to this canal, I believe there is water running through it now, is there not?—I believe they carried six or eight tons of coal through by the canal; they came to us to ask us to buy those coals as a favour, for the sake of being able to say, probably, that they had supplied us with some coals.

1586. Whenever they get their canal the coals could not cost 28s. in the transport; they must be cheaper then, I apprehend?—Yes, certainly.

1587. Chairman.] You stated the other day that you would put in a statement of the weight and measurement of the mails sent from Southampton for the years 1864 and 1865; have you that statement with you?—I have a complete statement of the number of packages dispatched by each vessel from Southampton for the years 1864 and 1865, distinguishing the India, China, Bombay, and Australian mails. This, of course, only indicates, in a certain degree, the quantity of mails that we carry; some are dropped upon the voyage, and, of course, others are taken in. But I think I may say that our vessel for Australia leaves Point de Galle with about the same number of boxes, and the same bulk of mails on board, as shown in the return from Southampton.

1588. What is the greatest weight of any mail in that statement?—I see that on the 4th of November last year there were shipped on board the "Tanjore" at Southampton 106 tons measurement, and 49 tons weight of mails for India, China, and Australia. I think that there may be even a larger amount than that.

1589. Have you any other returns that you wish to put in?—I have brought up one return (*delivering in the same*) to show that the Company has not been standing still, as I heard a witness state the other day. This is a list of the ships we have built and purchased from 1859 to the present date: 28 ships have been built and purchased since 1859; the total tonnage of those ships amounting to 48,986 tons, and the horsepower 10,190.

1590. We may assume that all the ships were of the best construction and containing the latest improvements up to the time of their being built?—Yes; in some of them especially we made an effort to produce something in the way of reducing the consumption of fuel, which should perhaps exceed anything that has been hitherto done, but we have been to a certain extent disappointed; we hope, however, to overcome the difficulty in time.

1591. Have you any statement of the mileage rates of passage money that you charge?—Yes; I have brought a statement in which our rates of passage money are put in comparison with those

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of the Cunard line. There is a great deal of misapprehension existing upon that point; I take our rates in every case to and from Southampton, and their through rate from Liverpool to New York. Our rate from Southampton to Alexandria is 30*l.*, the distance being very nearly the same as between Liverpool and New York; and we include in our victualling, wines and spirits *ad libitum* to the first-class passengers. Our rate to Alexandria comes out at 2½*d.* per mile; our rate from Southampton to Bombay is 3½*d.* per mile; the rate from Southampton to Calcutta is 3*d.*; the rate from Southampton to Hong Kong is 3*d.*, but from Southampton to Sydney it is only 2½*d.*; I take the chief cabin fare by the British North American Royal Mail steamships from Liverpool to New York, and I find that 25 guineas is their rate for the same class of accommodation as I have taken in our case; they provide first-class victualling, but they exclude wines and spirits; and their rate comes out 2*d.* and a fraction per mile.

1592. Have you any statement of the French rates of passage-money outwards?—That will be found to be identical with ours to and from every place with which the two companies are in communication. I will put in a return which will show that (*delivering in the same*).

1593. Have you a summary of the postal convention of the Messageries Impariales?—I have the convention here in the original, but I have also a summary of the leading points of their contract, which contains a great deal of matter of interest. There are some points which might have a very material bearing upon the question of combining their service with ours.

1594. Will you just mention those points to the Committee?—I may mention that their contract is for 24 years, with three years to start it. Then to indemnify the Company for the expense of sending the ships to the India and China seas, a sum of 75,000*l.* was allowed them. That is a permanent expense with us. We are always sending new vessels out, and sometimes we have to bring others home for repairs; it is an expense of from 5,000*l.* to 10,000*l.* always to send one out or bring one home.

1595. Mr. Childers.] That 75,000*l.* to the Messageries Impariales is a bonus at starting?—Yes, it is a bonus at starting. Then the State advances them, in capital, 12,000,000 francs, or 450,000*l.* This debt will not be productive of interest. It is to be reimbursed by the Company in 12 annuities of 42,000*l.* Then this is an important clause, that at the expiration of the 12th year of the working of the service of India and China, and under condition to give notice to the Company of one year in advance, the State will have the right to cancel the concessions made to the Company. Should the State not make use of this power, the contract is to be carried out for the full period of 24 years, but in case of the contract being cancelled the State shall, on the demand of the Company, take over all the “naval material” (by which I understand their ships,) employed in the Indo-Chinese service. It shall, also, re-purchase the stores of coals and plant of all descriptions collected to the eastward of Suez, for the use of the workshops and navigation of the Company, in fact all establishments on shore specially created for this service. The value of these to be settled by a professional valuation. Then this is most important. The State binds itself not to subsidise any private

service from any part of France, or from Suez, in connection with ports already comprised in the convention with the Company. Our Government give nothing of that nature, of course. In case of war, the State takes the risk of capture and other damaging results, unless it shall have released the Company from the performance of its services. So that, in case of war, the Government have only to say to the Company, we release you from the performance of your service. If the State should not so release the Company, it shall be in its power to carry on the service in whole or in part, at its own risk and peril. If the service is suspended, the State has the power to take immediate possession of the vessels remaining without employment, with all their stores and equipment. So that they have only to signify to the Company that there is a state of war, and that they carry on their business at their own risk, and immediately take possession of all their ships and material.

1596. *Chairman.*] What is the subsidy?—The subsidy is on a sort of sliding scale; for the first three years they are to have 300,000*l.*; for the next three years, 280,000*l.*; for the next three years, 260,000*l.*; for the next three years, 240,000*l.*; for the next six years, 220,000*l.*; and for the last six years, 200,000*l.*; the average amount per mile is 25*s.* for the first period, and 20*s.* for the second period.

1597. Mr. *Wequelin.*] Have you examined their reports to their shareholders?—I have the last two.

1598. Do they report that they have made a profit by the India lines?—If my memory serves me, in their first report, after they had been at work for 12 months upon the line, they expressed a great deal of disappointment, and they explained to the shareholders that the India-Chinese line had not of itself produced sufficient to pay a dividend, and that consequently they had gone to their Atlantic line to make up a dividend upon the India-Chinese service. I think I am correct in saying that.

1599. Mr. *Ayrton.*] With reference to the rates of passage-money charged by the French Company, are you aware whether they make any distinction between first-class berths forward and first-class berths aft?—The French vessels are fitted in some degree differently to ours; but in the return, we have taken that class of accommodation of ours and theirs which exactly correspond to each other; at least, as nearly as possible.

1600. Is not it the fact that on the other side of Suez it is more agreeable to be forward than aft, especially in a screw vessel, and that, practically, by their making a lower rate for their berths forward, they do charge very much less than you do for a certain part of their accommodation to first-class passengers?—We find that experienced passengers in our vessels are generally willing to go forward. An experienced passenger generally selects a forward berth if he is going at the hot season.

1601. Do you make no difference in your rates?—No, we do not.

1602. Do not the French charge considerably less for many of their berths forward; and, therefore, do they not, in effect, charge very much less than you do for a great portion of their first-class passengers?—I think that the berths to which you refer are upon the lower deck. I am not quite able to answer that question; but they have

have subdivisions of the passage money which we do not make, and some of those subdivisions apply to a class between what we should call the first class and the second class.

1603. Are they not merely the allocation of berths, and are not the berths that they give at the lower rate just as good as the berths that you give at the higher?—No, I think not. We have what we call reserved accommodation, for which we charge a higher rate, and so do they also. I think that that is, perhaps, the point that you have in your mind, we have omitted from the comparison what we call reserved accommodation and what they call reserved accommodation, and have brought our rates for ordinary passengers into comparison with their rates for ordinary passengers. I have their handbook here, which I have procured since the last meeting of the Committee; it does not indicate that distinction to which you refer (*handing the same to the Honourable Member*).

1604. Sir Henry Rawlinson.] Do you know what number of ships they have on their line?—I think they have seven or eight ships; their communication is only once a month, and their obligation under the convention, I think, is to send out eight vessels.

1605. What is the aggregate tonnage of those seven or eight vessels?—They are larger vessels than ours. I think they are vessels of nearly 3,000 tons burthen. I see the company engages to have afloat, three years after the date of the concession, 12 steamers; four of those steamers from 400 to 500 horse-power, and eight of 228 horse-power. Those 12 steamers must be, or must have been, built in France; the average speed per hour to be nine and a-half knots and nine knots respectively, and of this number of

vessels, four on this side, and eight on the Indian side.

1606. Mr. Moffatt.] What is the date of that convention?—It is dated the 3d of July 1861. I have it here at length, in the original, if it is desired to have it appended to the Report (*delivering in the same*). I would ask permission to correct a little mistake which I made in referring to our commissariat the other day. I think I stated that we consumed 1,300,000 bottles of wine. I should have said wine, spirits, and beer.

1607. Mr. Ayrton.] Have you ever tried the experiment of separating the consumption of those things from the general passage money?—We have not tried it, but we feel quite assured, from the experience of a number of years, that it would not suit on board our vessels; it would not meet the taste of the majority of our passengers. It is a matter that we are asked to do sometimes by a passenger who abstains from wine and spirits; but we are quite persuaded that it would not answer in the case of Indian passengers generally.

1608. Do you not think that it would prevent a great deal of waste, and economise very much the expense of the journey?—It would involve the necessity of what you might call a bar on board the vessels; in fact, for myself, I am perfectly persuaded that it would not be found to answer. It has been looked to, and very seriously considered on many occasions.

1609. Mr. Laird.] Are you aware that in the Cunard service they have excluded wine and spirits, and allow people to pay for what they get?—They do; but I think the class of passengers is different; our voyage is longer, and there would be very great inconvenience in an Indian voyage in doing as they do.

RICHARD ATWOOD GLASS, Esq., called in; and Examined.

1610. Chairman.] I BELIEVE you are the Managing Director of the Telegraph Construction and Maintenance Company?—I am.

1611. You have had a great deal of experience, have you not, in the construction and laying down of telegraphs, both land wires and submarine cables?—Yes, considerable experience.

1612. Will you state some of the lines with which you have been so connected?—I may mention some of the principal lines, commencing as far back as the year 1853; the original line between Dover and Calais, the Hague lines, the line from Newfoundland to Nova Scotia, and many other lines in different parts of the world. The last important line is the Malta and Alexandria line, the cable for which was originally designed for a line from Falmouth to Gibraltar.

1613. You are well acquainted generally, are you not, with the lines of telegraphic communication between this country and India?—Yes, necessarily so.

1614. Do you know anything, practically, of those lines?—Yes. I may say, that when the Malta and Alexandria line was completed, my late firm, Glass, Elliot & Company, entered into an arrangement with the Government to take a lease of the Malta and Alexandria line on certain conditions, and to work it in the best possible way. The result of that was that I went out to Malta and opened the line, if I may so call it, taking with me European clerks, and establishing a communication, as perfect as we could, between Malta and Alexandria.

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1615. Have you a lease of that line from the Crown?—We had a lease of five years from Her Majesty's Government.

1616. Has that lease been extended since?—Yes, that lease has been extended since.

1617. What are the conditions of the present lease?—One of the conditions of the present lease is a per centage, to be paid by the company which I represent, being at the rate, I think, of 3 per cent. upon the whole outlay in connection with the line.

1618. How much does that amount to per annum?—I think about 15,000 £ a year. But I may say, at this stage, that the figures representing the cost of that line are very considerably higher than they should be, inasmuch as they contain the cost of the line, originally intended to be sent out, to be laid between Rangoon and Singapore. I may say, that a similar line could be constructed now at very nearly half the cost.

1619. Then 500,000 £ is assumed to be the whole sum that the Government are out of pocket, in one way and another, in connection with the line which now lies between Malta and Alexandria?—Yes, the cost is 480,000 £, I think, including every expense.

1620. You pay the Government now 15,000 £ a year as a return upon the capital expended upon that line?—Yes. There are other conditions; we have to maintain it.

1621. Mr. Childers.] Is that lease completed?—It is in course of completion. There is a good deal of detail necessary before we can complete

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it; there are some conditions in connection with that lease which involve the expenditure of a sum of 98,000 *l.* or 100,000 *l.*, within a term of 10 years. I should explain that that outlay became necessary in consequence of the cable that was laid there never having been designed for that spot; it was designed for deep water, and has been laid in shallow water, and the result is that it is constantly requiring repair in the shallow water, and it is being replaced with heavy cable suited for shallow water, at a great additional cost; under the terms of our lease we have sent out a cable of the value of 50,000 *l.* or 60,000 *l.*, which is used from time to time, as the light cable becomes inoperative.

1622. *Chairman.*] Do you charge the cost of those repairs?—No.

1623. The Government, you say, get 15,000 *l.*?—Yes, nett. The lease is for 42 years, with the option, on the part of our company, to limit it to 10 years.

1624. You are now, by means of that wire, bringing to Europe the telegraphic communications which pass between Europe and Egypt?—Up to the present period we have done so; I may, perhaps, now give a little history of the working of it, because I think it will bear upon the point. When the line was first handed to us by the Government, now five years ago nearly, it was presumed that it would be comparatively valueless; in fact, we were considered great speculators in taking a lease from the Government of such a line, although it was upon a sliding scale at that time; whatever we received the Government got a portion of. It was then supposed by telegraph companies, who knew something about it, that it would be a very losing concern, and so it would, had the business continued as we found it, inasmuch as, in those days, a message from London to Malta frequently occupied a week in transmission. I have known a message, when I was out there, 14 days on the way, and on its arrival in Malta it was perfectly unintelligible. Therefore, my attention was first directed to clear the road, as it were, up to Malta from England. That resulted in the Italian Government, during the time that Baron Riccascoli was in power, giving to our firm, Glass, Elliot & Company, a concession under which we had the power, and exercised it, of placing our own clerks in the Italian offices, receiving our messages from England and forwarding them by our own clerks to Malta, and so on to Alexandria. The result of that was, that the speed increased very materially; it was previously, from a week or 10 days; before I left Alexandria, the working of the whole of the day caused only a delay of five hours upon the whole of the traffic, and the traffic afterwards increased from 200 *l.* a week to nearly 3,000 *l.* In other words, the merchants of Alexandria, when they found that they could get an answer within 48 hours, used the telegraph two and three times a day, many of them.

1625. Forty-eight hours between what points?—Between London, Liverpool, and Alexandria. After Baron Riccascoli left office there was great jealousy on the part of his successor to English clerks being in the Italian offices, and the result of that was that they said they must turn them out unless we paid the whole of their salaries. I felt it so important to keep them there that I agreed to do that at once. But that did not last long; they said they must get rid of them alto-

gether; that their own clerks were now in a position to execute the work properly, and that they did not require the interference from English clerks, and that they must get rid of them. We were obliged to withdraw them, and, as we naturally expected, the business fell back again; not only were there very serious delays, but such mistakes as rendered the messages perfectly unintelligible. At the time when our own clerks were there we found no delays, and the messages were received without mistakes. You might read them, as I have been in the habit of doing, some 40 or 50 together, and you would see at once that there was no error.

1626. *Chairman.*] Am I correct in believing that the errors you refer to arose entirely from circumstances connected with the Italian administration, as distinct from the French administration?—I am not prepared to say that to the fullest extent, but I may say a very large majority occurred in Italy.

1627. A message sent from London goes, in the first instance, to Paris, does it not, and from Paris to Turin?—Not always. If the express wires, as they may be called, are free, that would be the course. The usual course is that London speaks direct with Paris; Paris with Turin; Turin with Naples; Naples with Malta; Malta with Benghazi; and, by translation, Tripoli and Benghazi with Alexandria. That would be what we should call express working; but it does not necessarily follow that that is always carried out.

1628. Speaking for the most part, you have no reason to charge the French administration with sending messages on in an imperfect manner?—No; certainly not to any great extent.

1629. Your difficulties were entirely in Italy?—I attribute, I should think, three-fifths, or I might say four-fifths, to causes which I will explain; and, first, I may say, that all the employés are under the Government.

1630. The Italian system extends from Turin, by way of Naples, to Sicily?—Yes.

1631. Does it go beyond Cape Passaro?—No; the Mediterranean Extension Company there come in with 60 miles of line between that point and Malta; and they take up the traffic for that 60 miles, and we take it from Malta.

1632. Is that a separate and independent company, under a guarantee from the Government?—That is the only company under a guarantee from this Government, and they have that 60 miles between the Malta and Alexandria line and the Italian line.

1633. In whose hands is the administration of that part of the line?—It is in the hands of a company called the Mediterranean Extension Telegraph Company.

1634. Do messages pass into their hands at the termination of the Italian system at Cape Passaro?—Yes, and also at Malta. There is that administration between the Malta and Alexandrian administration and the Italian.

1635. Have you any knowledge of the financial position of that company with respect to the guarantee?—Since the Malta and Alexandrian line has been opened, I believe the traffic has enabled them to pay a dividend without having recourse to the Government. The increase of traffic has been such that their guarantee, which is a conditional one, has not come into operation. Their original capital, I may say, was lost, inasmuch as the lines to which that guarantee was given

ven became inoperative, and were lost. Now they have two lines, one from Sicily to Malta, some 60 miles probably; and the other from Malta to Corfu, some 60 odd miles; both which lines are in working order, and I believe that these two lines are their only property at present.

1636. In the event of your desiring to do so for the purpose of obtaining one uniform management throughout, so far as the English part of this communication is concerned, should you have any difficulty in acquiring the control over that line by means of a lease or otherwise?—I am not prepared to say. I may say that certain negotiations were opened between the two companies; but they feel, I think, that, having the Government guarantee, they are not dependent on the traffic for dividend.

1637. Have you any hope of being able to get restored to you that power of control in the Italian peninsula?—I may say that we are rather beyond hope, for through the instrumentality of Mr. Elliott, our Minister at the Italian Court, and Sir James Hudson, and some other influential people, we have lately obtained from the Italian Government a concession for a through line from the French frontier to Sicily; the through line to be our own; the line to be used only for our own business, and to be worked by our own clerks; and also a further concession for a line from Sicily to Benghazi, also to be worked by our own clerks, in which case we should avoid Malta. But there is also a feeling on the part of the Italian Government, that if they should be asked by parties interested to grant them a concession to Malta, they would do so if it were necessary. But I do not know that that could be rendered necessary, because we have a duplicate line *via* Benghazi to Malta, so that if we worked from Italy to Benghazi we might work back to Malta; for although the distance is great, in a telegraphic point of view, it is merely nominal.

1638. With whom does the power of granting the privilege of approaching Malta from Sicily rest?—The power of approaching Malta from Sicily would rest with the English Government. The English Government, of course, have a right at Malta to prevent anyone using the cable there without their consent. The Mediterranean Extension Company, at the time when they made the arrangement with the Government for the 6 per cent. guarantee, I believe gave up, as far as the English Government were concerned, any exclusive privilege that they might have.

1639. Have you recently pressed the English Government to make a line from Malta to Benghazi?—Not from Malta to Benghazi, but from Sicily to Malta. If it were deemed expedient that there should be a duplicate line between Sicily and Malta the English Government must give their consent to any party except the Mediterranean Extension Company landing a cable there.

1640. I understand you to say, that looking to the fact of the French service being good of its kind, to the fact that you have made arrangements with the Italian Government for having a wire of your own and operators of your own in the dominions of the King of Italy, and to the fact that there is now a communication from Sicily by way of Malta and Benghazi to Alexandria, we may assume that for all practical purposes there is a prospect of a good and continuous communi-

cation by telegraph with Egypt?—No doubt, subject of course to certain objections. I may state that although the telegraphic system in France, as regards the administration of it, is very good, yet we must not shut our eyes to the fact that there is a species of espionage there which is astonishing to English people.

1641. What is the state of the telegraphic service at the present moment in Egypt generally?—At present in Egypt our company have a lease of the short line from Alexandria to Suez, and before the line was open to India *via* Constantinople, we received a great many messages from India to Suez.

1642. That is the fragmentary residue of the telegraph to India Company's property?—That is the last portion that is left, and the only available portion. Our company pay them a rental of 2,500 *l.* a year, which just pays 5 per cent. on their capital, and we have the use of the line.

1643. A communication has been opened, has it not, between Alexandria and Diarbekir in Armenia?—Yes, *via* El Arish.

1644. Is that in operation now?—It is in operation, and I have received communications from Egypt very unsatisfactory in this way: that inasmuch as the continental Governments regulate their own tariff, and have reduced their tariffs for through messages very materially, the cost of a message *via* Constantinople and Syria to Alexandria, is less than it would be *via* Malta to Alexandria. Then they have a rule on the Continent, that every message must be sent through the cheapest route, without reference to speed or distance. The consequence is that merchants have been complaining that their messages have been four and five days on the road, and that some have not been received at all since the opening of this line *via* Constantinople.

1645. Is that line the property of the Turkish Government?—A portion of it, up to El Arish, the Egyptian Government take; from El Arish to Diarbekir it is Turkish.

1646. Does it go through Aleppo?—I do not know the exact route; it is a coasting line that I am speaking of now. I am speaking of the telegraph between Alexandria and Europe, not between India and Europe. There is a coasting line round Turkey, which is an alternative route to Alexandria from Europe.

1647. If that line were in good order, and the business were well conducted, it would afford, would it not, by means of passing a message from Diarbekir to Alexandria, a very good alternative against risk of accident in European Turkey or in Germany?—Yes, an excellent alternative. It takes four or five days now to send a message from London to Alexandria *via* Constantinople. I have a message here, received from Egypt, from Alexandria, on the 3d, singularly enough sent by our manager in Egypt, as showing how they are working now. This was a message, sent from England to Egypt on the night of the 2d of April, to Nubar Pacha, the Egyptian foreign minister. On the morning of the 3d, at 9.18, he wished to know who had signed that message. Our manager in Egypt telegraphed to London at 9.18 a.m. on the 3d of April: "Alexandria to London.—Repeat sender's name in No. 142, 2d April, addressed to Nubar Pacha." And the reply was received at Alexandria at 1.55 p.m. on the same day from London. That telegram left Alexandria at 9.18 a.m., and the information was obtained, and it arrived in Alexandria on the same day,

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R. A. Glass, Esq. at 1.55. At Alexandria the merchants are complaining that it takes four days. We could send a message in four hours, but, inasmuch as the Constantinople route is cheaper, the foreign administrations send by it as a matter of course, and the sender here cannot control it.

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1648. *Mr. Moffatt.*] Can you state the difference of cost?—I have not seen the tariff, but I think their price is 30 s., and ours is 27. 10 s.

1649. *Mr. Childers.*] Do you mean that the majority of messages between London and Alexandria go by Constantinople now?—They do now. Our receipts have fallen off one-half nearly since that route was opened. I had a message from a very important house complaining of this, and wishing to remedy it; they asked if they could send their message *via* Malta and Alexandria, but I am told that the foreign administrations would not even take notice of that.

1650. *Chairman.*] The practical remedy would be that you must reduce your charges?—Yes.

1651. In which case the public would get the benefit of the competition?—Yes.

1652. *Mr. Childers.*] Do you mean that if a telegram is sent from London *via* Paris to Alexandria, that message would be directed through Constantinople?—Yes; at present it would, unless marked and paid for the other way, according to the continental rules when a message arrives in Paris it immediately comes under the control of the Confederation, if I may so call it. They have certain rules laid down, and they go by the cheapest route without regard to speed.

1653. But I thought there were two Confederations, one of France, paid in Italy, and the other of Austria, Germany, and Holland?—Yes; the Austro-Germanic Union we have nothing to do with at present, or their line. We propose, and it is now under consideration, to have a line *via* Ragusa to Benghazi, by which means we should use the Austro-Germanic Union. At present, we are obliged to work with Paris.

1654. Are you speaking now of the France, Spain, and Italy Confederation?—Yes.

1655. How does that message go to Constantinople?—There are one or two routes, but I believe the majority of the messages go through Italy *via* Otranto and Valona across European Turkey, round to Constantinople, and so to Alexandria.

1656. Is the rate from London to Constantinople the same that way as by the Austro-Germanic Union?—I believe it is. I believe they have assimilated those rates very much; there may be a little difference.

1657. *Chairman.*] Have you sounded the bottom of the Mediterranean, between Ragusa and Benghazi, so as to know what you would have to meet with there?—We have made certain soundings, but the soundings for the submarine line, as originally conducted, and those taken now, are very different things; the soundings are incomplete. We have what may be called good deep sea soundings, but I do not think, from recollection, that there is more than 300 miles of what we should call very deep sea line.

1658. You have a very good bottom, have you not, as far as experience goes, between Malta and the coast of Tripoli?—Between Malta and Tripoli that cable has never given us the slightest anxiety, it is laid in deep water on a good bottom. It has been down six years and has never cost us sixpence.

1659. Your difficulty is in the neighbourhood

of Benghazi?—Yes, in the shallow water, generally, where the bottom is not properly surveyed. The system hitherto has been very much, to run a line by the map, without ascertaining what the bottom is, which is just like taking a railway over hills and mountains without surveying the line properly. We have found from experience that where the cable has worn out has always been in shallow water; it is more easily repaired, but it is an expensive operation. But that is the reason why the line, from Malta to Alexandria, was laid in shallow water, that it would not be lost, but could be repaired.

1660. Have you any account of the number of messages that you have carried over your line?—I can furnish the Committee with it, but I have not an account of the number with me.

1661. Have you any objection to state what your receipts have been?—No, they are published annually. Our receipts, including lost time, I think, are something like 50,000 l. a-year in round numbers, allowing for the time that the cable has been out of repair; that sum has absolutely been received.

1662. Out of that you pay 15,000 l. to the Government?—Yes.

1663. And the rest consists of working expenses and repairs, and your profit?—Yes.

1664. Is there any line of telegraph up the valley of the Nile?—Yes.

1665. How far does it go?—It is very nearly opposite Souakin; if the line is not already erected, it will very shortly be completed to Souakin, the materials are in Egypt for the purpose.

1666. Which is, I believe, in latitude 19°?—Yes.

1667. And, consequently, 13° to the southward of Suez?—Yes.

1668. Do you propose to use the land line for the purposes of communication with India?—Yes.

1669. In preference to carrying the line down the bed of the Red Sea from Suez to Souakin?—Yes, my reason for that would be this: the Viceroy of Egypt has in his employ, as his engineers and principal assistants, some Englishmen, and the line there, by the side of the Nile, is protected by the Viceroy, and wherever that is the case there is no fear of its becoming injured. If we had a wire of our own similar to that accorded to us by the concession in Italy, we should have the uninterrupted use of it without any interference from the Viceroy or his people, by making an arrangement with him to pay him a royalty of so much for every message. That would bring us to Souakin.

1670. That would carry your English management and English responsibility from the Italian frontier to Souakin and the Red Sea?—Clearly.

1671. Have you had an opportunity of seeing the evidence that was given by Mr. Latimer Clark, the other day, on the subject of continuing that line?—Yes.

1672. Do you agree with what he stated?—I agree with him very materially, but I think that I should go a little further than he does with regard to surveys. From our experience I think he hardly had time sufficient to survey the coast of the Red Sea and Arabia as it ought to be done.

1673. Commencing from Souakin southward?—Yes.

1674. Do you think that the bottom of the sea

sea there would require further investigation before you would proceed to lay down your line?—I think so. It is just at that point that the Government is proceeding with the work; but before we actually lay down the cable, I think that a much closer survey should be made, more particularly near the shores; I am speaking now with regard to the Alexandria and Benghazi cable, and all that line of sea coast; the promontories there are very rocky, but we find that within a few fathoms of that we get sand, and if the cable had been laid in sand, instead of on rock, we should not have been put to the expense of many thousands in repairing. You must have for these purposes as careful a survey for a submarine cable as you would for a railway, or more so if anything. We now know the cause of failure, and we must remedy it.

1675. With regard to taking a line down the Red Sea from Souakin to Aden, and so on by the route of the southern coast of Arabia to the entrance of the Persian Gulf and to India, do you see any difficulties of a formidable nature to encounter in that?—No, we have had occasion to go into that very fully, inasmuch as it was contemplated raising money to carry out that line. At that time Indian merchants were very much annoyed at the system of communication by the Persian Gulf, and they were anxious to have a line from Kurrachee to Bombay, and from Kurrachee to Aden. For that purpose we went very closely into it, and we arrived at the conclusion that we not only saw our way clear to lay the line, but upon certain terms we should be prepared to maintain it upon the same principle as we are doing the Malta and Alexandria line. That would of course involve closer surveys, but from the information that we obtained from persons who attended to the survey, Mr. Latimer Clark, Sir Charles Bright, and others, and our own engineers, we could see quite clearly that it could be done and maintained at a price.

1676. Does your scheme provide for the necessary funds?—Our scheme does not provide for any funds. We think this; that such a line must of itself be remunerative, and if gone into properly by people who understand the management, &c., it must be a remunerative investment.

1677. Have you any facts upon which you can test the amount of telegraphic business passing between the East and London?—I could obtain those facts. We have them in the office so far as our own line is concerned, and we could get them with the assistance of the Submarine Company to England, but that is no criterion, I think, with regard to the ultimate traffic. My experience of Alexandria was this: when I first went there, the messages were four days upon the route; a deputation of merchants had a meeting, and I met them, and they told me that if we could insure them a message in 48 hours, they would use the line to an extent that would astonish me. Before I left there, we got it to five hours, and I must say that the result did astonish me. We afterwards received as much as 3,000 £. in one week, as against 200 £.; when the line was first opened between Alexandria, London, and Liverpool; that is to say, one week it was 2,800 £., and another week, 2,700 £., but one week it was 3,000 £.; now the receipts have dropped again to 700 £., because they cannot rely upon the speed *via* Constantinople.

1678. Do you recollect what season that was?—I do not recollect; I know that there were two

causes; the American war and the cotton had a great influence upon the number of messages; a rise of one half-penny or a penny a pound in cotton was some 300 £. or 400 £. a week in our pocket.

1679. The sum you mentioned of 3,000 £. was the amount actually received in that place for the conveyance of messages from Alexandria to Malta?—Yes, to and from Malta.

1680. Where did they go to after Malta?—To Liverpool and all over the world.

1681. Have you any account of the receipts of the Indo-European line?—No; I have not had access to them; we know nothing of that line except that our company manufactured the core and the insulating material of the cable.

1682. Is your company still engaged in considering the extension of this line to India?—We are considering it certainly; having got this concession from the Italian Government, we feel that the time has arrived when we must have an express wire, if I may so call it, for the purposes of telegraphic communication with Alexandria. I may say that the whole of the merchants of Alexandria, without an exception, some short time ago, sent a petition to our company asking them to lay down a duplicate or an alternate line, inasmuch as the whole trade of the place was almost at a standstill by reason of the shallow water line that I have been speaking of being out of order, and upon that we have taken action so far that we have been consulting certain parties with a view of getting them to take up the whole scheme.

1683. Has any proposition, that you are aware of, ever been made to the French Government for the purpose of giving any company here the power of transmitting messages through France?—I am not aware of it, but I should think such a thing would fail as a matter of course; I have had a great deal of business with the French Government, and have at the present time, and I know that they will not allow of anything that interferes with them; that is to say, they will give no one power in France but themselves.

1684. They take copies, do they not, of all messages?—I may speak with some certainty upon that. I was surprised at being shown, in the Director General's office in Paris, messages of our own between Alexandria and England to Her Majesty's Government from their agents; it was made no secret of. Of course it was an extraordinary thing to show me a message from the Government agents in Alexandria to the Government at home; but that is their practice. I may state, that in anything connected with the telegraph and other matters, in which they think they have an interest, the Director General has copies of all messages before him as they arrive, and I believe they do not go forward until he gives his assent.

1685. Was your company in any way a party to the proposals that were made for taking over the service of the telegraph on the railway lines in India?—Our company have been consulted upon it, and we have had it under discussion. One of our directors went out to India with a view of making himself master of the extent of it, and we expect that unless the whole thing is under one management you will never get a satisfactory result.

1686. You mean that it would be a great advantage to the public if, by constructing a line to Bombay by the Egyptian and Arabian route,

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R. A. Glass, Esq., you were able by the same agency to send a message over the telegraphic and railway lines in India to any point with which those lines communicate?—Yes. I may illustrate that by this simple fact of the message of Nubar Pasha's, and the effect of getting an answer to a mistake in the same day is of immense importance in telegraphy. A man receives a telegram to send out 1,000 hogsheads of sugar, when it only means 100, and he does not know what to do; but if he can get his reply on the same day as to whether that is correct, and have it repeated, it becomes of great value.

1687. There would be great facility in identifying the responsible party, if anything were done amiss?—Exactly so.

1688. Have you had occasion to make any representations to any foreign government, with regard to the time required for making inquiries and giving answers to complaints?—Constantly.

1689. What is the time that they occupy?—Some two or three years ago it became a very serious case. There was a great complaint on the part of the public, and it was supposed that it attached to the English companies, that is to say, the companies at the other end. We knew that it was not so; and I wrote a letter to the Director General, at that time in Italy, drawing his attention to the delay which occurred in answering those questions; and I received a long letter from him, in which he said he thought that if the thing was settled in 18 months it was a reasonable time. He divided it into six months to consider it, six months to hand it to the different officers to report upon it, and six months to decide upon the answer and pay over the money. Their idea was 18 months.

1690. Have you given your attention at all to the present line of communication between London and India, by way of the Continent and Constantinople?—I have given it a good deal of consideration.

1691. Are you aware that there have been great complaints on the part of merchants, and other persons using that line, of delays and irregularities, and the incorrect rendering of messages?—Yes.

1692. To what do you attribute that?—I attribute it to a variety of causes, according to the different countries through which the messages travel. In Italy I trace it very much to this cause, that there is no good system of management there; they delay every message, no matter how important, if they have any messages of their own, particularly of an important character, to send. For example; I had occasion at Malta to see a message from the Governor General of India to Sir Charles Wood; that message was sent from Alexandria immediately on the arrival of the steamer, and was in Malta within five minutes; but it took the Malta office the whole day to get that message off to the first Italian station, and they did that at three different times; it was a very important message, and although it was a State message, and consequently had precedence of everything else, yet they said that they had their own State messages to transmit, and they were actually a whole day in taking this message from Malta.

1693. Was that under the administration of the Mediterranean Company?—Yes; but it was no fault of theirs. It arose in the office of the Italian administration. The Mediterranean clerk

at Malta would ask the Italian clerk at Naples or Sicily to receive the despatch. The clerk would say, "I am ready," and he would get off, perhaps, one-third of the message; then the clerk would stop him by saying, "I have a State message of my own," which, perhaps, was really some clerk asking another clerk at another station some unimportant question; and I have been told that that is very much the case, and the result was that this important Government message took a whole day to get through at three different times of transmission.

1694. Practically, through messages, though they may be of the utmost consequence, are subordinate entirely to local messages?—Yes, and the whole of the India messages of that day were delayed, and the whole of the mercantile messages were delayed until after this Government message went.

1695. Do you think that that objection exists with regard to the service through Germany and Turkey?—I may say, with reference to Turkey, that my experience of the Turks, and I have seen a great deal of their working, is, that in their case it is more idleness, I think, than anything else, and the same with the Egyptians; you never get them to attend; a clerk there will watch the instrument, and smoke his cigarette, and say, "Let them call;" it is just inattention.

1696. Is it true that they allow messages to accumulate on the file till there is work enough for them?—Yes, very often. To show the Committee to what extent it is carried in Egypt, the Viceroy, although he has the whole thing in his own hands and his own clerks, prefers paying our administration some 200 *l.* or 300 *l.* a year for his own private messages rather than send them by his own line; he cannot depend upon the clerks upon his line.

1697. Do you know anything of the internal administration of the telegraph at Constantinople?—I do not.

1698. You cannot speak to the working of the service between Constantinople and Bagdad?—I know nothing of it. From what I have seen of it, if it is worked by the Turks, that will account for the delay that has occurred.

1699. You think that a Turk is constitutionally unfitted for the work?—There is a lack of energy about him, and he is constitutionally unfitted for the work, as I know by experience.

1700. He is indifferent to what is going on in the external world?—Yes, quite so. I may say that there are great delays with those clerks, in consequence of their not understanding the language. You may think it almost absurd, but on one occasion, in Malta, there was a 400-word message, which occupied a considerable time in the transmission. The clerk who was receiving it was a Maltese, who ought certainly to have understood something of the English language. After a message is sent, it is usual for the clerk receiving it to send back how many words the message consists of; that is to say, after he has received a message, the first thing he does is to count it, and see that the number of words is right. Then the clerk at the other end sends back, "There are 399 words." Then the clerk says, "No; you are wrong; there are 400." That caused the other clerk to run them all through, and the result was that the Maltese clerk could only make 399 words, and the Alexandria clerk made 400. The next operation is to send the first letter of every word from one clerk

clerk to the other. They sent all that, but still the Maltese clerk could only make 399 words of it. At last, after going over it again and again, the Maltese clerk sent a message to ask if "John Brown" was one word; he had taken it as one word; and that alone occupied the line for over two hours, all other messages being delayed. I merely instance that as showing, where you are dependent on one line only, the necessity of having clerks who are not only accustomed to the instrument, but to the language to some extent.

1701. Have you made any propositions to the Turkish Government, with the view of acquiring control over the line between Alexandria and Diarbekir?—We some time ago, when Colonel Stewart was alive, sent a commissioner to Constantinople, with the view of getting a concession to lay a line from Alexandria to Diarbekir; but we found that, although we had Colonel Stewart's and the Government influence—for Sir Henry Bulwer assisted us—yet the Turks would not make any terms with us. We merely asked to be allowed to lay the line, but they would not listen to it.

1702. Mr. Childers.] With regard to the last question but one, is there not some mechanical process by which you can ensure correct repetition?—We send by the Morse instrument; that is a system of printing by dots and dashes, which is used almost universally on the continent. There is another system of printing by, I think, Mr. Hughes's instrument, by which they send the Roman letters; that is an American machine, and it is very pretty; but, unfortunately, whenever I have seen it in practice it has sent nothing but X's, Y's, and Z's; but I am told that it does answer very well upon particular routes.

1703. As yet you do not know any absolute means of ensuring correct repetition by a mechanical process?—I know no means of mechanically repeating to the eye; that is to say, there is printing by the Morse code, and if your clerk is a good printer he has a register of it for all time.

1704. But there is no actual means by which the instrument which sends on the message can simultaneously repeat the message?—No, not by the instrument; it is by the hand of the clerk.

1705. There is no discovery by which mechanical power could be applied so as to repeat a message?—I know of none; I know of no mechanical power of repetition at the time it is sent. After the clerk has received it he sends it back by signal; but I know of no mechanical arrangement for that purpose.

1706. You propose, in order to get over the difficulty between Malta and Sicily, to establish a duplicate line to Benghazi; would that line connect itself with the Austro-Germanic system, or with the Western Alliance?—I believe it is under what is called the Paris treaty now; it used to be under the Brussels treaty. It would not connect itself with the Austro-Germanic system unless there were a line laid from Ragusa across; anything connected with Italy at present is under the Paris treaty.

1707. You cannot connect between Benghazi and Cattaro, or Ragusa?—No; I do not know whether the Italians would allow us to land at Otranto, or somewhere there; if they would we could bring a line from Ragusa to Otranto.

1708. You could not go from Ragusa direct to Benghazi, could you?—Yes, we could do so; 0.43.

there is no difficulty in laying such a line, and it is part of the scheme.

1709. By which you would be independent of France?—Yes.

1710. And of French espionage?—Yes. There are three routes: one *viâ* Ragusa, another *viâ* Paris and Italy, and another the original route, which ultimately we must come to, no doubt, from Falmouth to Gibraltar and from Gibraltar to Malta; but at present the most inexpensive route would be *viâ* this direct line, through Italy or *viâ* Ragusa.

1711. So that if you went from Benghazi to Ragusa you not only would get over the difficulty of the Malta and Sicily guaranteed line which stands in your way, but you would go through Holland instead of going through France?—No doubt of it.

1712. With regard to the Malta and Sicily line, you endeavoured to persuade the Government, did you not, to allow you to compete for that line?—No; we said to the Mediterranean Extension Company, "You must amalgamate with us; we must all go together;" but they declined to amalgamate, and said they were quite satisfied as they were. We said, "If you will not amalgamate with us your 60 miles of line will so interfere with our scheme that virtually it destroys it," because the Committee can understand that if you have an administration occupying only 60 miles of line, and you have to communicate through that administration with the administration beyond, you get into hot water, and you never can get satisfaction. It is all guaranteed, and this intermediate administration serves its own views, and it has been productive of a great deal of ill feeling between the Italians and ourselves.

1713. Failing that negotiation, you endeavoured, did you not, to get the English Government to consent to your landing at Malta?—We had not got so far as that.

1714. Did you not apply to the Colonial Office for leave?—No, we had not got so far as that. As far as we were concerned, we were coming to the Government to ask them to reduce our rental in consideration of our laying a duplicate line.

1715. Did not you do so by a round-about way, through the Italian Government; did you not ask them to make such a proposal?—No; previously to coming to the English Government, we said to the Italian Government, "Will you give us leave to land a cable from Malta?" and their answer was, "With pleasure, provided we can." Then there was a communication, I believe, through the Foreign Office, with Mr. Elliott, with reference to the right of the Italian administration to give a second company leave to land. The Italian Government had before them the Minute of the Treasury whereby they asked the Mediterranean Extension Company to give up their monopoly; they had that minute before them, and they considered that that virtually exonerated them; that is to say, that if the English Government made it a condition with the Mediterranean Extension Company that they should give up their monopoly, in consideration of their guaranteeing them 6 per cent., the Italian Government read that as relieving them from the clause in their concession whereby they gave them the exclusive right, and they said, "That right has been abandoned in the arrangement which you have made with the Treasury."

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1716. But you did not at all press upon the English Government, did you, the renunciation of that monopoly?—No, we have not pressed that. We felt that, if we had asked the English Government to have done anything to assist the Malta and Alexandria line, they would, as a matter of course, have assisted us to improve the communication; that was our only object.

1717. So that you are quite open to a satisfactory arrangement *via* Malta, if it could be brought about?—Yes; and we always have been. We went to the Mediterranean Extension Company, and we said, "This thing is likely to come about; we have no wish whatever to go past you in your interest, but you should consider this matter, because your 60 miles just spoils the whole thing."

1718. Is their cable a good one?—Yes; I made it for them, and laid it some five years ago; and it has never been out of order a day.

1719. Is the line through the Island of Sardinia an open line?—No; that line has been taken out of our hands very much, and I do not know what condition it is in.

1720. Is there anything going on about the line between Malta and Corfu at present?—I am not aware. There is a line between Otranto and Corfu, but I am not aware of any direct line between Malta and Corfu; I have never heard of it.

1721. You do not know of any negotiations about carrying a line up that side?—I am not aware of it. It may be that if we can carry out that grand scheme that we have in view, we may wish to get, as it were, as many alternate routes as we can consistently with keeping the capital within moderate bounds.

1722. What are your facilities at Benghazi?—The facility at Benghazi is that it is an intermediate station, and instead of having the circuit that we should otherwise have of some thousand miles in one unbroken line, by reason of the station at Benghazi, we divide it into exactly one-half; it is a transmitting station.

1723. That station is on the shore, about a mile from the sea, is it not?—Yes.

1724. Is there a British Consul there?—Yes; there is a British Consul there.

1725. Is it a place where you feel that you will be likely to be protected?—The best answer I can give to that is, that all our employes at the port of Benghazi are little king sthere, and they get on uncommonly well.

1726. Is Benghazi in the Government of Tripoli or Tunis?—In Tripoli; we have never had the slightest difficulty at Benghazi, though I believe our clerks and consuls are about the only Europeans there.

1727. Do you know anything about the state of the old cable on the southern side of Arabia?—I do not; I have nothing to do with that.

1728. But the cable was laid, was it not, pretty nearly where you proposed to lay it?—I do not know at all; I have read reports with reference to that cable, and I have also had a good deal of hearsay evidence, but I think you will get better information, probably, from the gentleman who was out with it, Mr. Forde, who is here. I know nothing of it.

1729. So far as the failure of that cable goes, it does not alarm you with respect to the success of your own?—No; during my experience of the last 15 years I have known of no instance to cause the slightest alarm with regard to the

present form of submarine cables, provided they are laid properly; they were laid then imperfectly. We must bear in mind that a submarine cable to be perfect has only really been ascertained within a few years by the instruments which have been introduced.

1730. So that you do not hesitate at all in proposing to lay a cable down the lower part of the Red Sea?—I do not at all, for this reason—that we know that we have in 600 fathoms there an unmistakable good bottom, from surveys actually made, and that the coral reefs are higher nearer the shore. The line from Souakin to Aden, I imagine, will be found to be in every respect as good as between Malta and Tripoli. I believe it to be all sand in that depth, which is as good a depth as you could lay a cable in, because it could be recovered easily in 600 fathoms, and where it is likely to be looked after it will remain perfect.

1731. You stated in your evidence, did you not, that you look forward to a time when there will be a cable to Gibraltar, and from Gibraltar to Malta?—Clearly.

1732. In fact, that it is the only line that will render us entirely independent of the European Governments?—Yes. I believe in a very short time, as the telegraph becomes more developed, it will become an absolute necessity that English merchants and the Government should have uninterrupted control of all messages from England to India.

1733. And in that case we should have the whole control, except through Egypt?—Clearly; and the control through Egypt you would have in this way, that the Viceroy would enter into a subvention at once, I have no doubt, from information which I have received from Egypt very recently, to give us the exclusive right of using an independent wire without any interference on his part whatever with that wire. He would undertake to maintain it on our paying him a royalty, he would not have any control over the traffic, as they have at present, through France and Italy. He would merely receive his annual payment, but the whole of the operations will be in the hands of this company, or whoever may be the medium.

1734. Is there any such plan approaching maturity at present?—I think I may say there is. I have had a great deal of correspondence and communication with some very influential parties, who are deeply interested in studying this question; and though it is not quite ripe yet, I know that they think favourably of it; and as far as our company are concerned, we are prepared to co-operate with them, subject to the sanction of the Government. It would be a plan, of course, of a very comprehensive nature, and would require the sanction of Government before it was carried out.

1735. Sir Charles Bright.] I think there is some misapprehension in your answer to one of Mr. Childers' questions. It is the fact, is it not, that you can repeat by the repeating apparatus, so as to retransmit signals by machinery?—Yes.

1736. But, I believe, it is found in practice to be productive of much delay and error where there are many such instruments introduced into one circuit?—Clearly. I understood the Honourable Member to refer to the repetition of the message. The same hand that sends a message from London to Liverpool will not get it repeated from Liverpool mechanically.

1737. During

1737. During the time of your administration, whilst the line was under one control and worked by English clerks through Italy, and from Malta to Alexandria, you got up to a very considerable speed of working?—Very.

1738. What is the greatest instance of speed that you can mention?—The greatest instance, I suppose, would be that the death of Lord Elgin was telegraphed from Cairo and received in London in less than an hour.

1739. You have described the route of the line that you are about to establish in combination with other interests by way of the Red Sea. Can you give us any information as to the cause of the failure of the Red Sea line?—My information may be considered as second hand. I have seen portions of the line which showed that the cable must have been laid over very rough places. Again, there were minute faults which must have been in the cable at the time it was laid, and there were many other reasons why it failed. It was laid considerably too taut, according to the data. I had no means of judging, except from data which I have seen myself on the spot.

1740. You have no doubt that if your schemes can be carried out you can construct an efficient telegraph from the Franco-Italian frontier by way of Egypt and the Red Sea and the Arabian Sea to Bombay?—I have not the least doubt about it.

1741. In what time do you think a message could be passed from London to Calcutta at the average speed, supposing the working of the line was entirely under one control, and with all the apparatus and the staff of the line of the most perfect character?—I do not see that you should have a delay on the average of more than 8 to 12 hours upon the whole work of the day; that would be the average delay of the whole; many messages would arrive in an hour, and others might be longer; it very much depends upon the traffic on the line.

1742. Mr. Moffatt.] How long has the arrangement been in operation by which you have a separate wire through the Italian States?—The convention, I think, is dated about six weeks back.

1743. For what time have you the exclusive use of the wire?—For 40 years.

1744. For working that wire do you employ your own clerks?—Yes.

1745. There is no interference whatever on the part of the Italian Government?—No.

1746. Have you applied to France to see whether you could make a similar arrangement with the French Government?—We have not done that.

1747. Do not you think it advisable that you should do so?—I think it is advisable; but the French Government are difficult to approach except through the English Government. I should fail in getting it as an individual.

1748. Have you tried whether you could get it through the intervention of the British Government?—Not at present.

1749. If that could be done, it would make the line very perfect, would it not?—Most perfect.

1750. According as you have stated, it would want but one line of separate wire in the exclusive use of your company through France to make that line perfect to India?—Quite perfect.

0.43.

1751. Always assuming that the Viceroy of Egypt is willing to give you a convention similar to that which the Italian kingdom has given to you?—Yes, clearly.

1752. And you have very little doubt that the Viceroy of Egypt is willing?—I think I may say, from influential persons from whom I have received communications, and from the general feeling in Egypt, that he would be disposed to do it for a nominal subsidy.

1753. Is not there a loop line connecting the Egyptian lines on the Turkish side?—If you call it a loop line, there is a line from El Arish round the coast to Beyrout, and so on, and I think that it is in communication with Diabekir, Aleppo, Damascus, and those other places; and that line is in the hands of the Viceroy and his agents.

1754. And, consequently, all the arrangements that you might be able to make with the Viceroy with regard to the first line, might also be made applicable to the second line?—No; for this reason: the Viceroy is under terms with the Sultan to work the El Arish line. We had a concession to make the line to El Arish, and we should have done so had we not been denied the privilege of connecting with the Turkish lines, and a line to El Arish in the hands of a private company, unless you had the Turkish lines to join up to them, would be valueless.

1755. Have you made application to the Turkish Government for the privilege of a single wire?—Yes.

1756. What has been the result of that application?—The result of the application was, that they refused it. We offered to lay down, at our own risk and cost, a line from Alexandria or from El Arish to Constantinople, or to Beyrout, or to any of those places; and that application were supported by the English Government. Sir Henry Bulwer assisted our Board in the matter, and Colonel Stewart also.

1757. Was the offer accompanied by the douceur of a Royalty, such as you propose to give to the Viceroy of Egypt?—Yes; we offered them a toll, and they refused it. Colonel Stewart was interested very much in the matter, and he told me that he was quite sure that they would not entertain any such proposal, and that they would have it all in their own hands, therefore we reluctantly gave it up.

1758. What is the average time that a message takes now as between Alexandria and London?—Our manager there says that they are in very good time now, and come pretty correctly; the average time is from seven to eight hours.

1759. As between London and Alexandria it does not need that there should be anything like so long a space of time?—No; nor would there be if we had a direct line between Alexandria and London; provided that the traffic was moderate there is no reason why you should not get your messages as quickly as between Liverpool and London, the wire all being in one hand. Perhaps I may explain one reason why the messages arrive irregularly. Sometimes a message of to-day will arrive before a message of yesterday, although the message of yesterday went in due course; and it is very much accounted for in this way, particularly in Italy: if an outward message arrives at Turin, and the line to Naples is blocked, the clerk at Turin has instructions to get the next station he can to receive the message; the consequence is that the message goes round by the boot, as you may call it, of Italy, either

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either going by the wire on one side of the coast, or by the other, whichever wire happens to be free, and although that may be the longest way round, the message gets transmitted first; so that the message of to-day might arrive at Malta before the message of yesterday, which may be lying in the Naples or Turin office, waiting to get off by some line which is blocked.

1760. That would be assuming a block at some intermediate station?—It is a block at the particular office at which the message arrives. If Naples is blocked with all its wires at Messina, it would be sent to some other place. The clerks' instructions are to get the messages off to any one who will receive them, as long as they are on the route; to take them off their own file and pass them on to the next.

1761. The Committee have received considerable information with regard to the delays and inaccuracies which occur in the transmission through Turkey; is it your impression that that arises from idleness and carelessness on the part of the Turkish manipulators, or from some other cause?—From the experience that I have had of Turkey, and from what I have seen of the working of Turks and Egyptians; as I stated before, their inaptness generally for business, I think, is in a great measure the cause. As regards the

other portion, I think there is a general feeling that in the East, people have a notion of making money when they can.

1762. *Chairman.*] You were speaking just now of some negotiation between your Company and the Mediterranean Extension Company; was that negotiation in writing, or was it verbal?—The negotiation, to some extent, was in writing, and to some extent verbal. It was proposed by my Board that a committee should sit, and that the Mediterranean Extension Company should depute one of their directors to attend that committee with a view of seeing if some arrangement could not be come to. Captain Hamilton, authorised by their Board, attended the committee, and we, after consultation with him and going into the merits of the question, arrived, at all events, I think to his satisfaction, at a mode in which their capital should be represented in the new scheme; but upon further consideration, after he returned to his Board, we received a communication that they did not approve of it, that they thought the scheme too grand or doubtful, and that they would prefer remaining as they were.

1763. Did you receive that communication in writing?—Yes; I had it in writing from Captain Hamilton.

HENRY CHARLES FORDE, Esq., called in; and Examined.

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Esq.

1764. *Chairman.*] You are a Civil Engineer?—Yes.

1765. Employed principally in telegraphing?—I have been employed for several years in connection with submarine telegraphs, and principally with the lines between Europe and the East.

1766. Which lines have you been employed on?—On the first occasion, I was interested in the submarine lines between Constantinople and Egypt. I was interested in them as being partner with Mr. Lionel Gisborne who was the principal promoter of that system of lines. I was present at the laying of one section of that line, or rather, part of the section between Candia and Alexandria, that was in November 1858, and I was present at the time that the cable failed in the laying. From the town of Canea which is on the west side of the Island of Candia, we payed out 220 miles of cable when the insulation became very imperfect, there was a very great loss of insulation from some cause or other which we never exactly discovered and we thought it prudent to cut the cable; that was laid by Messrs Newall & Company. I was there not in the official capacity of Engineer to the company, but as being particularly interested in it, and also interested in the continuation of the lines to India. This cable was simply a gutta percha covered wire covered with hemp.

1767. Were you employed by the Government in connection with the Malta and Alexandria line?—Yes; Mr. Lionel Gisborne and I were the engineers for that line.

1768. Did you lay the line for them?—Yes, I did.

1769. Have you any evidence of a general character to give to the Committee with respect to that line?—The system adopted with regard to that line was this:—It was arranged that we should lay a shallow water line, principally for the reason that the Red Sea line got out of order, and being

very much in deep water, it was difficult and costly to repair, and finally was abandoned on account of the number of repairs. Therefore, we adopted the shallow water system on the Malta Alexandria line, but we also adopted a very different class of cable—a much heavier class—although that cable was not exactly suited to the locality. I might mention that the cable was originally designed to be laid between Falmouth and Gibraltar, and the contract was actually let by us on the part of the Government for that line.

1770. Have you had anything to do with that line since you laid it?—Not since it was fairly handed over to the Government, or to the contractors who work the line, Messrs. Glass and Elliott.

1771. Did you make yourself acquainted with the soundings and with the bottom upon which your cable is laid?—We did as far as it was possible in the time. The Government first of all decided to lay the cable between Falmouth and Gibraltar; it was afterwards transferred to Rangoon and Singapore, and they finally decided on laying that cable between Malta and Alexandria. It was then about the 1st of January 1861, and we were to lay it in the summer. The Government at our request sent out orders to have soundings taken; although the charts were apparently well made, and the soundings were pretty favourable, yet when Captain Mansell was ordered to take fresh soundings, he found that the soundings were very different indeed from what they were on the published charts, so much so, that after waiting some six weeks, I applied to the hydrographer to the Admiralty, the late Admiral Washington, and he said that he had received some soundings, but that they were so much at variance with the public charts that he had sent Captain Spratt to sound there instead of Captain Mansell; the result was, that Captain Spratt confirmed Captain Mansell's soundings.

1772. Did

1772. Did you select the line yourselves, or did you take the line prescribed to you?—We selected the line ourselves, with the advice and in consultation with the authorities at the Board of Trade and at the Admiralty.

1773. Upon the best information which you had before you at the time?—Yes.

1774. To what do you ascribe the breaks which we occasionally hear of as taking place in that line?—The breaks, as far as I know, take place altogether on the line between Bengazi and Alexandria, to the eastward of Bengazi; and that line is the shallowest line of the whole three sections; it has an average depth, as well as I remember, of about 47 fathoms, and when I have made inquiries of Messrs. Glassey and others who are intimately acquainted with it, I find that the breaks have always been in very shallow water, from 20 to 30 fathoms; in fact, the difficulty of laying that cable was so great, that we had to have three men-of-war to assist us.

1775. In what did the difficulty consist?—We wanted to get that cable laid in depths of between 50 fathoms and 100 fathoms; not less than 50 and not more than 100, and Captain Spratt and Captain Mansell were some three or four months sounding that section and resurveying it, as far as they could, but they found the inequalities of the bottom so great and so different to what we had anticipated that there was great difficulty in finding a uniform bottom for the cable.

1776. You took the best bottom you could find upon the information that you had before you?—Yes.

1777. Are you aware of any fresh information having been acquired since then which would enable a better line to be laid?—Captain Spratt has since completed his soundings; he had not time to complete them then; he has sounded a great deal more since, I understand, and I have no doubt that, by carefully selecting the bottom, a very good bottom might be found in rather deeper water.

1778. Have you any practical acquaintance with the Red Sea?—I was associated with Mr. Gisborne, as engineer to the Red Sea and India Telegraph Company, and I was present at the laying of the line between Aden and Kurrachee.

1779. Have you anything specially in connection with the laying of that line to bring to the notice of the Committee?—I attribute the failure of that line very much to the excessive tight paying out of the cable; on that occasion I was on board the ship as the representative of the company, more to report what took place and to select the route; but the contractors, Messrs. Newall and Company, had the whole responsibility on their shoulders of delivering the cable over to the company, and they took their own method of paying out, and would not be controlled in any way by the engineer of the company.

1780. Was it pointed out to them, at the time, that they were paying it out too tight?—Yes, it was by me.

1781. What is the general character of that coast for telegraphic purposes?—The coast between Aden and India is very favourable if we can believe the charts as they are published, but it appears, and from what I have seen and known of the locality, I should say it is a very favourable route, and the best route that could be adopted for a submarine line you can select

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almost any depth of water you like, from 800 to 100 fathoms, but, of course, a shallow water line would be rather the longest; it is a bottom free from all inequalities.

1782. When you say, if you can depend upon the charts, you do not throw any doubt upon the excellency of the charts, do you?—The charts were made for a different purpose—for navigation; but they never contemplated laying cables when those charts were made, and the consequence was, that if they got soundings over 50 or 100 fathoms they were apparently not so particular in placing them correctly on the charts; where the water is deep the charts show a number of what we call negative soundings—soundings showing no bottom.

1783. Are you aware that the whole of those seas have been most accurately surveyed by experienced officers of the Indian Navy from time to time?—I am. Admiral Smythe was considered a very good surveying officer, but it was his charts between Alexandria and Benghazi that were so defective in soundings. For instance, I may mention that at the headland above Benghazi (Rao sem), the water was shown to deepen gradually, for 11 miles, to 70 fathoms; whereas, over 400 fathoms were found at about one mile from the coast.

1784. In the laying out of that line, between Kurrachee and Aden, did you commence at Kurrachee or at Aden?—We commenced at Kurrachee.

1785. Where did you first come in with the Arabian Coast?—We laid a coast line from Kurrachee up by Gwadwr, nearly due west for 350 miles, and crossed nearly opposite to Muscat. It is very deep water across the gulf at this place. For the last 170 miles into Muscat the water varies in depth from 500 to over 2,000 fathoms; we found that depth of water very quickly.

1786. Where did you land?—At the town of Muscat. Then we left the town of Muscat, just at the same place, and came on to the Kooria Moorla Islands, passing round Cape Kas el Had.

1787. Then did you come to Macallah?—No; we did not put in to Macallah. I was rather in favour of putting in to Macallah on account of the long section from Kooria Moorla to Aden, but the contractor objected to it.

1788. In what average depth of water did you lay the line along the Arabian coast?—It was partly deep water and partly shallow. In some places the line is in 400 or 500 fathoms, but, as a general rule, the cable is probably in an average depth of under 100 fathoms along the south coast of Arabia.

1789. You attribute the failure of that line, you say, almost entirely to the line having been laid too taut?—I think, in the first instance, the design of the cable was too light; the pattern, I may say, was taken from the cables which had been laid in the Mediterranean between Malta and Cagliari, and Malta and Corfu, and that had worked up to that time, for a year, perfectly well, and did not fail until after this line had been commenced.

1790. In what year was the Red Sea cable laid?—In 1859 and 1860.

1791. It was manufactured probably years before?—The manufacture was commenced in October 1858.

1792. During the eight or nine years which have elapsed between that period and the present time, has the progress in the construction of cables,

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Esq.

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cables, and the experience in the power of cables required in particular places, been sufficient to assure you that there is every reasonable probability that a cable may be made quite sufficient for the purpose of that telegraph?—I am quite of that opinion. I have a specimen here of the Red Sea cable, about a foot long, and I have a specimen also of the Persian Gulf cable (*producing the same*). One great defect in the Red Sea cable was, that the iron wires were small and corroded rapidly, and there was no outer protection which prevented them from corroding.

1793. With regard to the line within the Red Sea itself, have you any acquaintance with that?—No; I was not present, but Mr. Gisborne was present at the laying of that line, and I have seen his report.

1794. To what did he attribute the failure?—To very much the same cause that I have attributed it to, and which I have mentioned here, to the lightness and the tight paying out.

1795. Were there no causes connected with the condition of the bottom of the Red Sea which, in his judgment, led to that disappointment?—There are very great inequalities in the Red Sea, especially along the coast, which aggravated, to a great extent, the evil of tight paying out.

1796. When that line was brought to the surface, was not it, in some instances, in a very decomposed condition?—It was in some places; I have never seen any brought to the surface in the Red Sea, and I can only speak of what I have heard and having frequently talked upon the subject. There was a great deal of animal matter sticking to it, which became very soon putrid on deck.

1797. How long had it been down?—It had been down about nine months.

1798. Did it indicate any volcanic agency?—I should think not.

1799. Which do you consider, with the experience you have had, to be the best line for telegraphic communication between this country and India?—I should certainly say the best line, if it could be carried out at present, would be the line which Mr. Gisborne originally proposed, from Falmouth to Gibraltar, from Gibraltar to Malta, and from Malta to Alexandria and through Egypt, by means of land lines, so as to avoid the worst part of the Red Sea, say to Souakin or to Massowah, and from Massowah to Aden, Maculah, Kooria Moorria, Muscat, and Kurrachee, by submarine cable.

1800. One advantage of that would be, that there would be a continuous cable in English hands, under English responsibility and management?—Yes; for present purposes, no doubt, such a plan as Mr. Glass has mentioned, as to the working arrangements through Italy and France would be the best, but eventually I have no doubt that the line will be made as I have

stated, being a more independent route for English messages.

1801. Are you at all acquainted with the progress of telegraphic construction in Egypt at this time?—I had a letter not long ago from Mr. Hartley Gisborne who is superintendent of telegraphs in Upper Egypt; he wrote to me on the 26th of January last, that the lines were under construction from Cairo to Khartoum, including a branch from Schendy to Souakin.

1802. Sir Charles Bright.] Are you acquainted with the bottom of the Red Sea, especially between Massowah and Aden?—Yes; I am acquainted with it from the charts, and from selecting the best routes.

1803. Have you seen the report of Mr. Mayes of the soundings and survey there during the repair of the cable?—Yes, I have seen it.

1804. There is no difficulty in laying a permanent line of cable between Massowah and Aden, in your opinion?—I should think not the least; it will require rather more care and attention than it will along the coast of Arabia.

1805. You are quite clear in your opinion on the subject of a permanent line being carried without difficulty along the Arabian coast to Kurrachee?—Quite clear.

1806. What is the depth of water between the Kooria Moorria Islands and Bombay?—As well as I remember, I should think it is about 2,000 fathoms.

1807. Then you probably would not recommend laying a cable direct from the Kooria Moorrias to Bombay without further study and further survey?—No, I should not.

1808. The distance between Bombay and Calcutta is about 1,500 miles. If you were told that the average rate of working between Calcutta and Bombay was reported upon by the director of telegraphs for the eastern division to the director general of telegraphs in India as late as August 1864 to be nearly 48 hours, or two days for each average message, should you consider that a creditable mode of conducting the telegraphic business?—Quite the reverse. I should say that between Calcutta and Bombay, a distance of 1,500 miles an hour, for a message would be ample time, or less if you worked by relay. In fact, we have worked from Aden to India through 2,000 miles of cable at the rate of four words a minute backward and forward without any difficulty.

1809. Supposing such a line were adopted as that which you have described as a line which can be carried out with the greatest facility without loss or delay; that is to say, from the Italian frontier through Egypt to India, in what time should you think that a message could be relied upon as being carried from England to India by that route, supposing it were entirely under English management?—Under one management a message should not take more than two or three hours, and at the most six hours.

FLEEMING JENKIN, ESQ., called in; and Examined.

F. Jenkin, Esq.

1810. *Chairman.*] ARE you a Civil Engineer?—Yes.

1811. And a Fellow of the Royal Society?—Yes.

1812. Have you had any experience in fitting out expeditions for laying submarine cables?—I had considerable experience when acting as

assistant to Mr. Newall, the contractor, who laid down the Red Sea cable and many other cables; and since that also, I have directed my attention chiefly to submarine telegraphy.

1813. Are you acquainted with the evidence which was given before this Committee by Mr. Latimer Clark a few days ago?—Yes.

1814. Do

1814. Do you concur with him?—I concur almost entirely with Mr. Clark in his evidence. There is, in fact, only one point upon which I should wish to insist somewhat more strongly than he did, and that is the necessity of further surveys, and of more complete surveys when the cables are being laid. I think that we have already sufficient information to enable us to say with certainty, that a favourable line can be selected between Massowah and Aden, and also from Aden to India; but I think it would be absolutely essential that, when the cables are laid or immediately before they are laid, vessels, perhaps Government vessels, should accompany the expedition and survey the bottom very much more closely, putting down buoys at very short distances where an uneven bottom is to be expected. Something of the kind was done in the case of the Malta and Alexandria cable. In that case, my partner, Mr. Forde, did insist upon a very much more accurate survey than was originally contemplated, so as to feel the way by soundings, mile-by-mile, at the time the cable was laid. Nevertheless, we had it in evidence to-day, and I also know it independently, that by a still more careful selection of the route, and avoiding such rocky places as occur from time to time, a great many interruptions would have been avoided. And I may say, in connection with the Red Sea, that although the cable certainly was too light, I examined the cable during its manufacture, and tested it electrically; and I have no doubt that the materials used were extremely good, and that all the improvements that have been made since, in testing and examining materials, would have confirmed that opinion, and that the radical fault in the cable was its being altogether too light, and insufficient on that ground only, and not on account of the quality of the materials.

1815. Do you concur with Mr. Forde in thinking that the loss of that cable is to be attributed, in some degree, to its being laid too taut?—I think, in some degree, it is to be attributed to its being laid too taut, and especially to its being laid too taut across places which had been imperfectly surveyed; so that there were great changes in the depth, and that when any decay did take place—as decay will always take place where such uncovered cables are laid—the weight of coral hanging between two points of suspension broke the cable. No doubt, if it had been laid more carefully, there would not have been so great a number of places of that description.

1816. The progress in the improvement of the manufacture of cables has been very great during the last eight or ten years?—Yes, it has been very great. The materials themselves are better, and people have learned to spend more money; that, I think, perhaps, is the chief improvement. The cables are laid now of a very much heavier and more substantial kind than used to be laid.

1817. There has been a great deal of dearly-bought experience?—Yes, undoubtedly; but almost all failures have taken place in cables which are laid in deep seas, where no access can be had to them, and where they cannot be repaired. I have prepared statistics by which I find that almost every cable weighing two tons per mile and upwards, has been permanent at least for 5, and often for 10, and 15 years, and that almost every cable weighing less than two tons has failed within five years of its being laid; so that the weight and substantial construction

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seem to give the greatest guarantee of permanent success.

1818. Do you think that, on the whole, a good route to India may be found by way of the Red Sea?—I have no doubt of it.

1819. The object of this Committee is to ascertain what is the best method of communicating with India by telegraph; should you give it to the Committee as your opinion that the Red Sea affords the best route of communication?—That would depend upon how the best routes were defined. If you were to look simply to geographical conditions, then I think the Persian Gulf route is the best. The bottom of the Persian Gulf is more favourable than the bottom of the Red Sea, and so much care would not have to be taken in paying out the cable; but when you consider how large a portion of that route is in foreign hands, and in the hands of the Turkish and Persian Governments, I think the Red Sea route very preferable; but only on that account; and if I may be allowed to express an opinion I think that a double route is almost essential, and that one route, whichever was selected, would be insufficient.

1820. And there would be the advantage of the double route affording great public security?—Yes, it would afford great public security, especially if it were joined at various points. For instance, if a scheme which I have heard described here were carried out, the double route would be joined at Diarbekir and Alexandria, and at the foot of the Persian Gulf, near Cape Mussendon. A break might occur at several points upon both those routes; nevertheless a message, by going backwards and forwards from the first route back to the second route, and then from the second route back to the first route, would still reach England safely; so that it is not only important to have alternative routes, but that they should be joined together at as many points as possible, forming loop lines; and I should further urge, if it were possible, that the two alternative routes should be, as far as might be, under one management; that not only one route should be under one management, but that both routes should be, as far as possible, in one hand.

1821. But there would be no security would there to the public in that case against monopoly?—Pardon me, you would certainly not have competition bringing down the price of the messages, but you would have this security, that there would be no reason for the messages, which are started by one route not being transmitted on by the second route, in case there was any delay, or choke upon the first. The message then would find its natural and easiest route, in every such case, whereas if the lines are in two hands which compete, you can only have one line in each hand, and a single break then would either stop a message or delay it by making it strongly to the interest of the company in whose hand it was to keep it as long as possible.

1822. Have you considered what would be the proper time for communicating if we had one or two perfect systems of communication with India?—I think that the average time might be about three hours, and I will give my reason for saying so. It is found that even now the average time between Kurrachee and the head of the Persian Gulf is about 45 minutes, and only 10 minutes has occasionally been occupied in that manner. Looking to that experience and also to the experience

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experience of the Alexandria and Malta line which is managed by Mr. Glass, and which is very similar, and comparing the relative lengths of the Persian Gulf cable, and of the Malta and Alexandria cable with the total distance between England and India, I arrive at the conclusion as a simple matter of arithmetic, that a message need not take longer than three hours, even according to the present system of management; and I am far from saying that even that would not be diminished.

1823. Which do you think, upon the whole, is the best, a land line or a submarine line?—It depends entirely upon the country through which the land line passes. Where you can have a thoroughly good access to the land line, there can be no question that it is more convenient and safe. It is cheaper in the first instance, and therefore more advantageous; but where, as in the case of India and other semi-civilised countries, a good access cannot be had to the land line, far more satisfactory results are obtained by submarine cables. I have had some information from a clerk whom I had recommended for employment in India; he has written to me once, towards the end of last year, to tell me, that on the line between Gwadar and Kurrachee, the alternative land line, they had never been able to transmit messages at all during the night; that even the short line, at the Kurrachee terminus, of about 18 miles, very often was interrupted, according to the conditions of the weather, chiefly during the night, or in damp weather, and that frequently, although there was no hitch whatever upon the submarine line between the Persian Gulf and that terminus, the 18 miles of land line stopped them.

1824. Is it your suggestion that there is some occult influence at work?—No, simply that the land lines were not properly erected, possibly in the first instance, and secondly, that a good access cannot be had to them, if they are laid where there are no railways and no sufficient roads. I have also had experience in that respect; for instance, in the Island of Sardinia, where the service is very bad, and the land lines are in a detestable condition, because from similar causes loss of insulation and even breakages of the wire cannot be readily repaired.

1825. Then you would draw another distinction. As you distinguish a land line from a submarine line, so you draw a great distinction, I suppose, between a line going across country, and a line taking the course of a railway?—A very great distinction, indeed. It is a question of access, both with submarine lines and land lines. If you can get to them to repair them, they answer admirably well, but if you put them out of your own reach, they answer very badly indeed. In Australia, on the contrary, the land lines are found to answer very well.

1826. Have you any view as to the manner in which the Government may best assist undertakings of this kind, without grants of money?—I think that by assisting in surveying the ground and carrying out work, which they have officers specially trained to perform, and vessels specially adapted for, they can give great assistance, and that assistance would not be for one company only, but for many companies. It is not an advantage to private individuals, so much as a public gain.

1827. Do you think that services of that kind

are almost invariably well performed by Government officers?—I think they are when the object is clearly explained to the officers who are employed; in the surveys and the soundings which have hitherto been made, the object has been to make quite certain that not less than a certain depth of water existed. They did not care how much more there was; but now for our purposes we require to know really the configuration of the bottom, and when that is explained to the officers of Her Majesty's service I think that they can perform the work more efficiently, probably, than any other persons.

1828. You think that there is an amount of public interest in the case sufficient to justify the Government being called upon to incur some expenditure?—I do; and I feel no doubt about it. A message which arrives, giving the price of cotton or the price of corn, costing the individual who gets that message, 4*l.* or 5*l.*, certainly benefits the country at large, so much as to justify the moderate expenditure I recommend.

1829. Mr. *Laird.*] Have you considered the question of telegraphic communication with China and Australia?—Yes, I have been consulted by several gentlemen with regard to lines in connection with India between China and India, and from India also to Australia.

1830. Are there any difficulties either with regard to China or Australia?—The evidence which has been given with regard to the communication between England and India will apply to the communication with China, and to a great portion of the line to Australia. We have already sufficient information to know that good lines can be selected all the way to China, and for a great portion of the route between India and Australia. But some further surveys are required between the Islands of Java and Timor before we can be quite certain that a good route can be selected. There is every probability of it, but we cannot be sure.

1831. So far as inquiries have been made there seems to be no difficulty?—Probably none.

1832. Mr. *Moffatt.*] Are the Committee to understand you to state that in your judgment it would be wise that the Government should make preliminary surveys for most of the lines of sea telegraph?—I think so.

1833. Irrespective of whether the companies will propose to undertake the construction of them?—Irrespective of any of the companies.

1834. It was stated by a previous witness that the first cable laid down in the Red Sea had been liable to very sudden and rapid decay; has the same effect been observed upon the cables recently laid down in the Red Sea?—There have been no cables recently laid down in the Red Sea; but we find that both in the Mediterranean and Channel, and other Seas, there are certain bottoms in which the cables do decay very rapidly, especially where they are covered with very small wires, as was the case with the Red Sea cable; there is a larger surface exposed to oxidation, and the decay is more rapid; and in large wires we find the decay very much more slow. Where such cables as the Persian Gulf are covered with a bituminous compound, the decay is not sensible.

1835. What has been the effect of the high temperature of the Red Sea upon the cable?—I think that no injury has resulted from that temperature.

JAMES RUSSELL, Esq., called in; and Examined.

1836. *Chairman.*] Have you prepared a translation from the *Livret Chaix* French guide of the table of the *Messageries Impariales* Company?—I have.

1837. Will you put it in?—Yes (*delivering in the same*). J. Russell,
Esq.

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Sir JAMES CARMICHAEL recalled.

1838. *Chairman.*] Have you prepared a memorandum on the subject of improving the system of telegraphic communication between England and India?—Yes.

[*The same was delivered in, and is as follows.*]

“SUGGESTIONS for improving the System of Telegraphic Communications between Great Britain and India, so far as relates to the Lines between London and Constantinople.

“It is proposed, in the first place, to apply to the French and Austrian Telegraph administrations to organise a direct service between Paris and Vienna.

“Secondly, to apply to the Austrian administration to organise a direct service between Vienna and Belgrade; and, thirdly, to obtain permission from the Turkish Administration to organise a direct communication between Belgrade and Constantinople, placing at both stations competent English or French telegraph clerks, so as to insure that messages arriving at Belgrade would be transmitted direct to Constantinople, and *vice versa*.

“In the event of these direct services being established, a despatch would first be transmitted from London to Paris; secondly, from Paris to Vienna; thirdly, from Vienna to Belgrade; and, fourthly, from Belgrade to Constantinople. It would thus be only repeated four times in its transit; while all liability to the occurrence of mistakes at the Servian and Turkish stations, between Belgrade and Constantinople, would be entirely avoided.

“The advantages of this route over any other between London and Constantinople would consist in the direct and unbroken communication between Paris and Vienna, in the acknowledged efficiency of the French telegraphic system, and in the fact of the Submarine Telegraphic Company possessing three cables, containing 14 wires, between England and France, thus making any interruption to this route most improbable. In the event, however, of any such emergency, the lines to Berlin, through Belgium and Holland, and the line from Paris *viâ* Turin, Otranto, and Valona, would still be available.

“The establishment of the direct line to Vienna would further obviate the delays so frequently complained of, consequent on messages

for India being transmitted from Berlin through Russia.

“The ideas above stated were suggested to the late Colonel Stewart, by whom they were favourably entertained, and the Director General of Telegraphs in France, to whom they have also been submitted, has promised, when required, to negotiate with Austria for the establishment of the direct service with Vienna.

“At the same time the Director General pointed out the following reasons, which might, to a certain extent, influence both the French and Austrian authorities against embarking in this plan:—

“1. That the actual number of Indian messages is at present unimportant; and,

“2. That the proportionate receipts of the French and Austrian Governments would hardly warrant an additional outlay to secure this traffic, especially as, in case of errors occurring on their respective lines, the amount of reimbursement is very considerable.

“It appears, therefore, most necessary to make some arrangement to secure the hearty goodwill and co-operation of the French and Austrian Governments, and this might be effected by allowing to them a small additional rate on the transit of the messages between Paris and Belgrade. Suppose, for instance, that from the 2 l. 10 s. now received by the Indian Government on each despatch an amount of 10 per cent., or 5 s., were deducted for this special service, this sum would enable an additional 2 s. 6 d., or three francs, per message to be allowed to the French and Austrian Governments respectively, and would most probably fully meet any objections which might arise from the increased expenses caused by the establishment of this system; while, on the other hand, the advantages derived from it by the commercial classes, and the public generally, and the consequent development of traffic, would amply compensate the Government of India for the small reduction of their present tariff.

“J. R. Carmichael,
Chairman.”

“Submarine Telegraph Office,
“58, Threadneedle-street,
“26 April 1866.”

Friday, 27th April 1866.

MEMBERS PRESENT:

Mr. Baillie.
Sir C. Bright.
Mr. Childers.
Mr. Crawford.
Mr. Laird.
Mr. Marsh.
Mr. Moffatt.

Lord R. Montagu.
Sir H. Rawlinson.
Mr. Schreiber.
Admiral Seymour.
Mr. Stansfeld.
Mr. Turner.
Mr. Weguelin.

ROBERT WYGRAM CRAWFORD, Esq., IN THE CHAIR.

GEORGE D. CHETWYND, Esq., called in; and Examined.

G. D.
Chetwynd,
Esq.

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1839. *Chairman.*] ARE you the Accountant at the Post Office?—The Receiver and Accountant-General.

1840. Have you any statement to make to the Committee, with reference to a remark made by Mr. Howell, in his evidence the other day, as to the apportionment of the charge between the Bombay and the China services?—I should like to state to the Committee what took place when the communication was made to me by the Peninsular and Oriental Company, with reference to the estimated cost of the Bombay service. When Mr. Bayley, the assistant managing director of the Peninsular and Oriental Company called upon me with reference to the question of the cost of the Bombay service, he brought with him a memorandum showing what the Peninsular and Oriental Company considered to be the cost of the Bombay service. Mr. Bayley told me that the estimate which the Post Office had given in, differed very materially from the estimate which the Peninsular and Oriental Company had made, and I told him that the estimate which we had put in was intended to show the comparative cost of the India portion of the service, as distinguished from the China portion, and that it was not intended in the paper in question to distinguish the cost of the Calcutta line from the cost of the Bombay line; that in framing the estimate we had followed the usual course, and had taken the average rate of 4 s. 6 d. per mile for the whole service, as applicable to parts of the service; and that as regarded his memorandum of cost, I could give no opinion upon it until I had caused it to be examined. In reply to his request that I would correct the figures, I pointed out to him that even if I found his statement to be quite accurate with regard to the Bombay line, the only result of any alteration which I could make, would be to throw the difference of cost on other portions of the Peninsular and Oriental service. I think, therefore, that Mr. Howell has fallen into a mistake in supposing that I have made any admission of error, as no such admission was made by me. Moreover, I am still of opinion that our estimates are correct for all practical purposes, and especially as regards the object for

which they were constructed, namely, the separation of the cost of the China service from the cost of the Indian service generally; and I think that they are as nearly accurate as the circumstances of the case will readily admit, with reference to the division of the two branches of the Indian service.

1841. Mr. Howell's statement was to this effect, at Question 1255, "In the papers which are furnished to the Committee, the cost of the Bombay service is set down at 80,000*l.*; that is incorrect, and I believe the Post Office are quite ready to correct it. The actual cost of the service is 48,000*l.*, giving us a rate per mile upon that service which I believe is the lowest of any known ocean service. The rate per mile that we receive on that service is 9*s.* 7½*d.*, which is a misprint for 2*s.* 7½*d.*?—Yes, it is 2*s.* 7½*d.*: that is what they say they receive.

1842. How do you correct your statement?—I do not propose to correct our statements.

1843. How do you propose to correct Mr. Howell's statement; in what respect do you allege Mr. Howell's statement to be incorrect?—I do not admit that my statement was inaccurate. I say that Mr. Howell's statement is incorrect with regard to that. I made no such admission. I consider that our estimate is roughly accurate. Of course, absolute accuracy is impossible in matters of this kind. We could only hope to give a rough estimate of a service like that. The services of the Peninsular and Oriental Company are so mixed up together, and their contracts extend over such a long period of time, and the whole service is so fragmentary, as one may say, that it is very difficult to separate the portions.

1844. The difference between you and Mr. Howell appears to be this, that in your estimate you have taken the average as 4*s.* 6*d.* a mile, extending over the whole of the India and China service of the Peninsular and Oriental Company, and Mr. Howell has taken the actual mileage amount receivable upon the Bombay service only?—Yes; that is so.

1845. Are you aware whether any negotiation is going on between the Peninsular and Oriental Company and the Post Office authorities with reference

reference to a payment being made for the services performed by the Company between Shanghai and Japan?—Although that is not in my particular department, I am able to state from my knowledge of the fact that a communication was received from the Peninsular and Oriental Company last year stating that they had carried on a bi-monthly service between Shanghai and Japan for two years, for which they had charged the Post Office nothing, and that they would be unable to continue that service with the same regularity; or they would not bind themselves to carry on the service with the same regu-

larly unless a moderate subsidy were paid to them, and they applied for such a subsidy. The matter has been for some time under consideration, and it is not yet decided; indeed, it is still under consideration.

1846. Do you know whether the Company receive any payment at all for the letters that they carry between Shanghai and Japan?—Not any payment whatever.

1847. Do you know whether they levy privately any postage charge upon the letters?—Not any, that we are aware of.

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HENRY CHARLES FORDE, Esq., recalled, and further Examined.

1848. *Chairman.*] HAVE you brought with you your report to the Secretary to the Board of Trade upon the Malta and Alexandria Telegraph?—I have.

1849. Will you be so good as to put it in?—Yes (*delivering in the same*).

1850. Have you also with you a map illustrating the proposed line to India by way of Egypt and Arabia?—I have.

1851. Will you put it in?—Yes (*delivering in the same*).

H. C. Forde,
Esq.

JOHN HENRY GREENER, Esq., called in; and Examined.

1852. *Chairman.*] I BELIEVE you have been employed as telegraphic assistant to Colonel Kemball, the Consul General of Bagdad?—Yes.

1853. For how long were you in that department?—Five years.

1854. When did you go out?—At the end of 1860.

1855. Have you recently returned?—Yes, five months ago.

1856. During that period were you employed in connection with the Turkish line in Asia?—Yes, upon the Turkish and Arabian line.

1857. In what capacity have you been associated with that line?—I was employed as assistant to Colonel Kemball in constructing the line from Bagdad down to the head of the Persian Gulf through the Arab districts, and in going over the line to inspect it from Constantinople to Bagdad, that is to say, the line already made by the Turks.

1858. You say that you were assistant to Colonel Kemball; are the Committee to understand that he had the responsible charge of the construction?—Yes, he had the responsible charge of the construction from Bagdad down to the head of the Persian Gulf.

1859. You were in charge of the engineering department, I presume?—Yes, under Colonel Kemball's instructions.

1860. In what condition did you leave the line?—It was in very good condition when I left, and it was working very well; the line from Bagdad to the head of the Persian Gulf, was the most perfect part of the line through the Arab district, and is I believe the part of the line which has been working best; since the first construction of it, from 12 days after it was finished, it has never been touched at all by the Arabs, and it has been continually working.

1861. Is that line constructed up to the best standard of the present day?—Yes, I can safely say that it is. It has iron poles of a very good description, and very good insulators, but the arms are of cast iron, and too weak; many were broken during the construction of the line; they ought to have been stronger; but since the line

was finished they have not broken so much as I anticipated.

1862. During the time that you have been connected with it, there has been no failure arising from defective construction?—No, not at all; not in that part of the line.

1863. The only case of defect, I think I understood you to say, has been from interference on the part of the Arabs?—Yes, they broke the poles, cut the stays away, and cut the wires; while we were constructing the line, we had several cases of that kind, but not since.

1864. You were in communication at Fao with the Indo-European wire, were you not?—Yes.

1865. Are they in separate offices there?—Yes, in separate offices; the Turks have one office, and the Indo-European people have another office contiguous.

1866. Are the wires connected?—No, they are not connected; the messages have to be handed over from the Turkish office to the Indo-European.

1867. Are you also practically acquainted with the line between Constantinople and Bagdad?—Yes, I went over the whole of it from Constantinople to Bagdad with Colonel Kemball.

1868. That was a line which was constructed by the Turkish Government, was it not?—Yes, it was constructed by the Turkish Government under English superintendence.

1869. Was that done under a contract?—No, it was no contract; it was constructed by salaried men belonging to the English artillery.

1870. Will you describe, in a few words, the direction of that line, beginning at Constantinople?—From Constantinople to Ismid, Ismid to Angora, Angora to Jyzgat, Jyzgat to Sivas, Sivas to Kharput. Those are the principal towns where there are stations; from Kharput to Diarbekir, Diarbekir to Mardin, Mardin to Iezireh, Iezireh to Moasul, Moasul to Kerkuk, Kerkuk to Bagdad, and then the Arabian line from Bagdad to Hillah, Hillah to Dewaniyeh, Dewaniyeh to Dirajee, Dirajee to Bussorah, Bussorah to Fao, at the head of the Persian Gulf.

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1871. What

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1871. What is the general character of the line with regard to its construction?—From Constantinople to Bagdad it is constructed on wooden poles, and one wire is insulated by Mr. Latimer Clark's porcelain insulators, and the other is insulated by Siemens's insulators.

1872. Does the line work well when it is properly managed?—Very well indeed.

1873. So far as complaints are made in this country, and in India, as to the irregularity of the communication, they do not, in your judgment, arise from any imperfection in the construction of the telegraph?—Not the slightest. I tested the line all the way through, and I consider that the line ought to work as well as any line in the world.

1874. Does the severity of the winter, in some parts of Asia Minor and Armenia, interfere with the working of the line?—In some parts it does. The line has been taken through the valleys; instead of keeping the beaten track and making a more circuitous route, they have taken a direct line in Asia Minor.

1875. What effect has that upon the working?—In the winter time the valleys get filled up with snow, and the men who look after it, in case of the wire breaking, cannot get to it; they are obliged to wait until the snow melts. That has been the case once or twice with one wire, but never with the two at the same time. We recommended, on our way down, that those portions of the line should be removed on to the main road, and the Turks promised that they would do so; and I believe that they have done so in many instances, which is a great improvement. This winter the line has been working remarkably well through Asia Minor, and, of course, this has been the worst time.

1876. Where are the head quarters of the superintendents of the line as between Constantinople and Fao?—At Angora, Sivas, and Bagdad.

1877. Where are the general head quarters?—Constantinople.

1878. Is the telegraph worked from Constantinople practically?—Yes, everything has to go from Constantinople, as regards the working of the line; instructions of every kind, and stores of every kind.

1879. The construction of the line being good, to what do you attribute its imperfect working?—In the first place, I attribute it to the line not being properly looked after as regards the insulation being kept up properly; the insulators get broken, which they will do, and instead of the Turkish line-men putting in a new insulator, they take a piece of wire and tie it round the iron bracket, thus making a connection with the earth down the pole, and dozens of these will cause the line to work very imperfectly.

1880. Has that often been the case?—Yes, often; there were numbers of them when I went the first time, and on my road home, now through Asia Minor, I saw many cases of the kind.

1881. Did you point it out to those who were in charge?—Yes; and I altered many of them whenever I could, to show them that it was wrong; when I came over the line just now I saw a great improvement in that respect, but still I did see cases. These things being numerous, they cause the line to cease working altogether; a few of them would not matter, but they are very numerous.

1882. Is there any other cause to which you

can ascribe the imperfection of the working of the line?—That is the principal cause, and in case of the wire being broken, the men will not go out to look after it; they are indolent, lazy fellows, and stop in their villages until somebody turns them out to go to the place; those are the great faults as regards the engineering part of it.

1883. What does the indoor establishment consist of?—There are about six clerks at each principal station; according to the terms of the convention between Turkey and England, they ought to be clerks who understand English, but very few of them do; most of them understand it very imperfectly; they are Armenians; there are a few Italians, but they are mostly Armenians, Turkish subjects.

1884. Are there any Greeks?—Yes, there are some Greeks; but they are mostly Armenians, Turkish subjects.

1885. Are they tolerably well up to their work?—They can work their instruments very well, but they do not understand the English language; perhaps one man at a station will understand English pretty well, but that man is only on duty half his time; when he is away, a message comes through with little errors which are not detected, and the error is increased, and then sent on to the next station, and from not understanding English, the error is increased again at that station; the great cause of messages being so mutilated is that they do not understand the English language. Colonel Stewart managed to get an English clerk appointed to each of the principal stations when the line was first opened, and it was arranged that those Englishmen were to check all messages passing through; but instead of those Englishmen being employed in that way, they are put on duty as regular clerks to send messages; and the consequence is, that they get their messages all right enough while they are on duty, but they are only on duty a certain number of hours, and when they are away there is no check at all, and consequently the messages are sent on in a mutilated condition.

1886. As one person cannot well be constantly present, you think that there ought to be more than one clerk who is competent to read English messages?—There ought to be two, at least: one there all day, and the other all night; the offices are supposed to be open 24 hours, so that there ought to be two good English clerks at each station.

1887. How often is a message repeated between Constantinople and Bagdad?—When the line is working well it is repeated only once, that is at Sivas; but sometimes it is repeated at Mosul, and sometimes at Diarbekir, just according to the state of the line; if the clerks were up to their work, and properly attended to their instruments, they ought to send it through from Constantinople to Fao every day; there is no reason why they should not; it is merely a matter of attention.

1888. What ought to be the average time upon the Turkish section from Constantinople eastward?—As to the average time, I should think that two hours ought to be ample, most decidedly, for a message to Fao, and that is giving sufficient time for everything; of course, if there is a breakdown it is a very different matter; but when the line is in working order two hours is ample time; in fact, it ought to be less.

1889. Do

1889. Do the authorities listen readily to any representations that are made to them?—Yes; they do listen to them, but they are a long time acting upon anything; they are a long time making any alterations that may be pointed out to them.

1890. Do you think that that is owing to indifference rather than unwillingness?—Yes, decidedly indifference; I think it is not in them to act promptly upon any matter; they cannot do it; they must sit down and smoke upon it.

1891. Is it true that at some of the offices messages are sometimes kept for days without being sent on?—Yes; as I was coming through Constantinople there were upwards of 200 messages waiting there to be sent on. Fuad Pasha had taken the line for the use of the Turkish Government, and it had been closed for I do not know how long; there was an accumulation of upwards of 250 messages at Constantinople.

1892. The evidence before the Committee is that from London about 30 messages pass per diem; that would indicate that there must have been a delay, including Continental messages, of probably five or six days?—Yes, I dare say it would be so; but of course that is an exceptional case; it is only rarely that they take the line in that way; but they do it when they have anything particular to do, and stop the European work.

1893. Do you know what they do with the messages when they receive them; do they put them on a file?—Yes; they put them on a file on the instrument generally, or close by the instrument.

1894. Is it a fact that when the clerks are clearing the file they take those that are at the top first, and consequently they send the latest messages before the earlier ones?—I do not think they do that at Constantinople, but they may do it at the smaller stations; take Sivas, for instance; they may do it there, because they do not know the difference scarcely, the clerks not understanding English; they may know the dates, but they do not trouble themselves about the matter; but at Constantinople they send them away according as they are sent into the office, I should think.

1895. Considering the great importance of this telegraphic communication between England and India, do you consider the prospect satisfactory as to the efficient performance of the service?—If the Turks keep the thing entirely in their own hands, I do not think that the work will be got off satisfactorily to the public; but if they would allow the English Government to have a little control over it, and to place two or three English signallers and good English inspectors on the line, there is not the least doubt that the work would be got off through Turkey very satisfactorily. Of late messages have been coming through the Turkish dominions in two or three hours, because the lines have been in good order, and if they were kept up to their work it would be done so every day.

1896. What is the system of inspection that is carried on by the Turkish Government?—They have one inspector for about 350 miles, and this inspector is supposed to go over his length twice a year, in the spring and autumn; that is not sufficient considering that you have Turkish workmen on the line to do everything that is required; and in the interim the line gets into very bad order by those men not doing their

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duty, not renewing their insulators, and attending to all the little minutiae that are required in telegraphy; the consequence is that by the time the inspector goes again he finds that the line is almost out of working order by not being attended to by those Turkish workmen. If the Turks would employ, as I recommended long ago, a kind of sub-inspector for each length, so that he should be continuously on the line, it would be a very different matter, because he would turn the line men out and make them do their duty, and instead of the line being gone over only once in six months, the sub-inspector would be able to go over it almost every month, which would be a great advantage.

1897. It appears to be your opinion that the construction of the line, being in all respects good, the imperfections of which the public complain so much, are due entirely to inefficient administration?—Precisely so; that is just the case; if they would improve their administration and management, there is not the least doubt about messages going through satisfactorily.

1898. You think that the administration would improve by placing two or more Englishmen, or persons understanding the English language sufficiently, at every repeating station?—At every principal station on the line.

1899. And by the establishment of an efficient system of inspection?—Yes.

1900. Would you suggest that those inspectors should be Englishmen or Europeans?—No, I would let the sub-inspectors be Turks; the men who are now performing the duty of chief line men, if they were put into a position to go along the whole length, I would have them Turks, as that would answer better; there are some of them very good men indeed, several whom I have seen do their work well.

1901. Your observations apply, do they not, to the whole of what we may term the Asiatic system?—Yes, to the Asiatic system, south and east of Constantinople.

1902. Do you find that the messages that you receive at Fao from India are generally in a correct and satisfactory condition?—No, very far from it, some of them. In one instance, a Swiss merchant in Bagdad had a telegram from India, and he could not understand a word of it, except that it was meant to be English, but it was no more English than Persian; it might be any thing. He had it repeated, but it was no better, and he had it repeated a third time, but he could not understand it even then. That is one instance, and there are many from India in that condition.

1903. Where do you suppose the fault in that case to rest; is it in the internal system of India, or in the Indo-European part of it?—In the internal system, no doubt, in India.

1904. Do you find, as far as you are acquainted with the Indo-European line, that it is well worked?—Yes, I think it is. I have no hesitation in saying so. Take the cable, for example; messages have always come through that cable very quickly indeed, and reached Bagdad from Kurrachee.

1905. Do you find that the messages which you deliver to that line from Fao received from Europe, are sent on expeditiously?—Yes, always.

1906. Then as representing, so to speak, here the Turkish line, you have no complaint to make of the working of the Indo-European line?—Not

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the slightest. I presume the Honourable Member alludes now to the line from Fao to Kurra-
chee; I am persuaded that that line has worked
as well as any line possibly could do; messages
always come through it quickly.

1907. Is not a line being recently made from
Diarbekir to Alexandria or to El Arish?—Yes.

1908. Are you at all acquainted with that
line?—No, I am not.

1909. Do you know by whom it was made?—
It was made by the Turks.

1910. On the same principles of construction
as the line through Asia Minor?—Very nearly
the same. The wire is much smaller, and not so
well adapted for sending messages a long dis-
tance; but it was merely put up for the accom-
modation of the Turks, merely for their local
work.

1911. Do they receive messages by it? For
instance, is there a junction at Diarbekir?—Yes.

1912. Would the office at Diarbekir receive a
message from Fao and forward it to England by
way of Alexandria?—It has been done from
England to India, but I know that messages
have been very much delayed by going that
route.

1913. In the event of a message being re-
ceived from Europe by way of Alexandria, at
Diarbekir, would that message be immediately
sent on to India?—Most decidedly it would; and
it would go quickly enough from Diarbekir, I
have no doubt.

1914. Looking at the risks which always attend
a single line of communication, are you not of
opinion that the line from Diarbekir to Alexan-
dria may become of material public advantage in
relieving the public of its dependence upon a
single line?—I should think it would if it were
put into proper working order, but the Turks
have not done so yet. I am in a position to say
that that line is not working so well as it may be
made to do. It was merely meant for the Turk-
ish work.

1915. However, you are well aware, are you
not, of the terms of the convention between Her
Majesty's Government and the Government of
the Sultan with reference to this telegraphic
communication?—Yes.

1916. Is that convention in its terms sufficient,
do you think, for the purpose of securing to us
all that we desire?—I think perhaps it is, if the
Turks would carry out the terms of it; but they
do not seem to do so. I think that we might
put a pressure upon them to make them carry it
out more to the letter.

1917. Is not one of the terms that an English
staff should be employed?—The signallers at all
events are to understand the English language;
that is plain enough in the convention.

1918. The term is "thoroughly conversant
with the English language" is it not?—Yes.

1919. You think that in that respect the Turks
have not complied with that term of the conven-
tion?—They have not; and it would make all
the difference in the world if they did comply
with it.

1920. Sir Charles Bright.] Do you know any-
thing of the line from Constantinople to Belgrade?
No, nothing at all, further than that I saw it here
and there as I was coming home up the Danube.

1921. Does it work pretty well?—I believe it
works very well indeed.

1922. You stated that you think that messages
might be carried in two hours from Constanti-

nople to the head of the Persian Gulf. What
do you think is the average time now occupied
by a message on the Persian Gulf line proper,
that is to say, from Fao to Kurra-
chee?—I do not
remember at this moment, but I know it is some-
thing very short.

1923. Is it half an hour, do you think?—I
think it is something a little over that, perhaps.
I know it is something considerably under an
hour, but I cannot tell you what it is.

1924. At all events, a message ought now to
go from Constantinople to Kurra-
chee in three or
four hours, ought it not?—Most decidedly.

1925. You state that there are two wires in-
sulated in different manners between Constan-
tinople and Bagdad; which of those wires is used
for the local service?—The lower one; the one
insulated by Siemen's insulators.

1926. Which do you consider the best wire of
the two?—The wire in the best condition is
Siemen's.

1927. They use the best wire, therefore, for
their local business?—Yes; the fact of the case
is that if they would keep the insulation on the
other wire up, it would be by far the best wire;
but the insulators being porcelain, there is great
risk of continual breaking. It is a wire that
was meant for the English Government when-
ever this line was used for communication with
India, and we have that wire, and they take the
other, but it is not kept in sufficiently good
order. You will understand that when one of
these insulators breaks, instead of putting another
in, they bind the wire down to the bracket.

1928. When you spoke of Fuad Pacha having
taken the line for some time, did he take the
wire which was devoted to the exclusive service
of the Indian and European traffic?—I expect
so, or otherwise the work would not have been
stopped. That is what I understood when I was
at Constantinople. He must have done so.

1929. According to the terms of the conven-
tion, one wire shall always be exclusively de-
voted to the Indo-European messages; is it the
fact that one wire is always so devoted?—Gene-
rally it is so, except on an occasion of that kind,
I imagine.

1930. But that being the worst wire, it is
divided into more circuits than the other, is it
not?—No; they work the same distance, and
they go to the same places precisely.

1931. However, if that wire were put in good
order, you could work direct from Constantinople
to Bagdad?—Yes; we have done so several
times.

1932. But you would do so always, would you
not, if it was put in good order?—Always; there
is no reason why it should not be so.

1933. What instruments have the Turks on
that line?—Morse's instruments.

1934. Are they in good order?—In very good
order indeed. They are very good instruments,
working very well. They are Siemens's instru-
ments.

1935. How many line men have they for every
100 miles of line?—They have a line man every
three hours; that is one man every nine miles.

1936. Will you explain the nature of the ser-
vice of the staff for maintenance, the number of
men employed, and their different duties?—
There is one line man every three hours; that is
every nine miles; he is supposed to go over his
nine miles every day, but I doubt very much
whether he does; and then, as I have said be-
fore,

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the, the inspector comes once in the half year; it is all the supervision that exists.

1937. How long does it take to repair a defect now, according to your experience?—I have known several wires break, and they have generally managed to repair it in a day; sometimes they take two or three days over it; but generally speaking they manage to get it done the second day.

1938. How do you account for a message being 3 days between Constantinople and Fao?—I could think it must have been in the spring time when it was 10 days.

1939. We have it in evidence that it was in the months of October, November, and December last year. How do you account for it at that time?—I cannot account for it; I cannot understand why it should be so. Of course immense delays occur in this way; the offices are open 24 hours, and some of the clerks are on duty 24 hours. It is a very long time for clerks to be in office, and at night after 12 o'clock, it is a common thing that instead of keeping up their work, they sit down and smoke, and go to sleep until six o'clock in the morning. There is therefore a delay of six hours, which causes an accumulation westward or eastward, and it throws the messages very likely a day out.

1940. They have no regular change of clerks, have they?—No; the clerks are on duty 24 hours, and off 48 hours.

1941. On the Persian Gulf line, they have regular watches, have they not?—Yes, I believe they have; they divide their time, I think, into eight hours or less than that even, as far as I remember.

1942. In what season of the year does the Asia Minor line work best?—After May; from May up to November.

1943. And during the winter months it is more liable to interference?—Yes; in the winter months in Asia Minor, on account of the snow through the valleys, and in the spring months in Turkish Arabia, on account of the rushes of water down from the mountains, which very often wash the poles away, and we have been broken down for 12 and 14 days owing to that, and could not do anything on account of the water rushing down and deluging the beds of the rivers.

1944. Shall you always be liable to that?—In the places where they are subject to that, they have fixed iron poles and well stayed them with brickwork and so on, so that I think now it is most likely it will not be so much the case; the accidents will not be so frequent.

1945. You will always be liable to broken wires in winter in Asia Minor, will you not?—Yes, but they can be taken out of those valleys and be put on to the beaten track where you can go the whole year round. For instance, we left Constantinople on the 7th of January in the middle of winter, and we were up to the middle in snow all the way, but we could travel; but where the line is taken, the snow was up almost to the tops of the poles, and the wires touching the snow, nearly.

1946. Will not this route be always open to those objections?—No, the route can be altered and can be worked all the year round easily, where the snow will never affect it.

1947. You have described the course of the line which you erected from Bagdad by the banks of the Euphrates, that goes to Kurna and from there to the head of the Persian Gulf; do

you consider that that is the best route?—It is undoubtedly the best; in fact at the time it was the only available route.

1948. Do you consider it better than by the Tigris?—Yes; the Arabs are far more settled than on the Tigris; four years ago it would have been impossible to have got a line there when we started with the line down the Euphrates; all the way down the Tigris there are numbers of small tribes. I cannot tell how many tribes there are, and those tribes are always fighting; whereas on the Euphrates it is through the Montefidje district all the way.

1949. Have you now the means of getting stores by water on the Euphrates?—Yes; we brought up all our stores by the Euphrates; there is one place where the water is very shallow, we had small boats, where the banks of the Euphrates are broken away for 15 miles; in fact, it is a complete sea.

1950. You cannot send any steamers up?—No; not any farther than Suk-esh-Shinekh, about 150 miles above Bussora. For 15 miles, as I said, the banks of the river are broken away, and it is a perfect sea on each side, and then above Suk-esh-Shinekh there is plenty of water in the river again, where steamers could go.

1951. Are the Arabs pretty well settled there now?—Yes, they were very quiet indeed when I came away, and all the time we were putting up the line (after we were fairly started), they were quiet; the sheik is appointed for three years; a year and a half of the time is gone now, I suppose; when the time is up, if they appoint another sheik, it is a question whether there will not be a revolt in the country again; if a new sheik is appointed, probably there will be, and the chances are that something will happen to the line, but as long as the present sheik holds office it is all right, the line will be protected.

1952. Then we are not to be surprised if there should be an interruption arising from the Arabs being in revolt?—Not if there is an alteration in the sheikship.

1953. Do you know anything of the working from Teheran and Bushire?—I know that up to the time when I left, they were working the whole line from Bagdad and Teheran and Bushire in summer; it works very well indeed, it is a long length; they have breaks down there as at any other places.

1954. Are there English signallers there?—Yes; there are English signallers right through, from Bagdad to Bushire.

1955. At Teheran to Shiraz and Bushire?—Yes; there are English signallers at all those places.

1956. Do you know anything of the working of the line from Teheran to Russia and Tiflis?—I do not know anything about it any further than I know that it works very badly; I had a communication lately from Major Champain, now in Constantinople, and he says it is working very badly indeed; messages that have been sent that way have been delayed a very long time, and he wrote home to ask me if I could do anything to prevent messages being sent that way. Messages going by Russia have been three weeks, and so on, at the same time, that messages from Constantinople to India and to England have been going through in two days, therefore I am led to believe that the Russian line is very defective; and in Persia also they have been rather unfortunate; they have been broken down there

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there for some considerable time through heavy snow storms, Major Champain informed me.

1957. Do you know anything of the internal lines in India between Kurrachee and Calcutta and Bombay?—I do not know much about them. I have merely passed through that part of India on my way out three years ago; the lines then appeared to me to be in a very bad condition; I made many inquiries of the state of the line from Bombay to Kurrachee, and I was then told it was very seldom that merchants got their messages through in less than three or four days; that was in 1863.

1958. That line is about 500 miles, is it not?—Yes, it is about 500 miles. At that time they were finding very great fault, but I imagine that it will now soon be better. You must understand that they had no insulation, or if they had any it was very bad, owing to the wet and one thing and another.

1959. Lord Robert Montague.] Where was it that you said the Arabs cut the line; was it between Bagdad and the head of the Persian Gulf?—Yes, between Bagdad and the head of the gulf.

1960. Was that from a spirit of animosity, or from cupidity, do you think?—It was a little bit of mischief, and in a fit of pique with the Sheik, and they cut it down, but it was not on our account at all; it was spite against him. On one occasion, just after we had got the line up, and we were going ahead with the work, we had about two miles of wire cut down; they did not touch the posts, but merely cut the wire and took it away. Some of my people went back to see what was the matter, and they found that some Arabs had taken the wire and made a bridge across a canal, where they had some thousands of sheep, that they wanted to cross; they had stretched wires across this canal, and put a lot of reeds on them; the place is very marshy, with reeds growing about 13 feet high, and they laid those reeds across upon the pieces of wire and made a kind of little bridge for the sheep to cross.

1961. What is to prevent their doing the same mischief now?—They do not care about doing it now; they thought that they would like to do it just in the same way as they do in England up to this day, when new telegraph lines are put up.

1962. Except in case of a revolt, you think they are not likely to do it again?—There is not the least chance, I think.

1963. If they should do so, is there anything to prevent a message being sent round through Persia to join the Persian Gulf line at Bushire?—No; that could be done, and it will be done more satisfactorily very shortly, because about next November I think they will have a second wire to Persia, which will make all the difference. They have been broken down very much this winter in Persia, but it is simply because, in one or two places, they have made the line through the valleys instead of keeping on the high ground; but that will be altered now.

1964. Is there no other portion of the line where the natives would be likely to cut it, or injure it at all?—No. The Arab district is the most dangerous, but it is safe enough as long as the present Sheik is in his place, but if anything should happen, there is the Teheran route. I might observe, that on my way home from Diarbekir towards Constantinople (I came through

Asia Minor home), I saw that the Turks had put up a third wire which was meant to take the Alexandria work, in order to relieve the two Constantinople wires of any work coming from Constantinople; the total Turkish work for Syria was to be sent by this third wire to Diarbekir. However, instead of their putting up insulators, they had merely stapled the wires up to the poles all the way, and in some places they had driven in a nail and twisted the wire two or three times tightly round the head of the nail. I remember when I got to Sivas, the English clerk on duty there came to me, at the house where I was stopping, and he said, we have had a third wire put up from Diarbekir, going on to Scutari, but he said we cannot work it either up or down. I said I do not think it is likely that you will, as it happens not to be insulated in any way. He said we never knew a word about that; our inspector never told us that there were no insulators. That is a specimen of the way the Turks do their work. It is very likely that money was granted to put up this wire and the insulators, but the insulators never found their way there. That is just the sort of thing that is done in Turkey, and excepting we can get some alteration in the management, I do not think there is much chance of our doing much good.

1965. Sir Henry Rawlinson.] When you went with Colonel Kemball to inspect the line, did you not find that the porcelain insulators were in a bad condition, and recommend that they should be altered?—Yes, that they should be altered and replaced by stronger insulators.

1966. And that has never been done?—That has never been done. There were parts of the line when I came through Asia Minor that were in a much better condition, because I saw that the insulators had been replaced.

1967. Were the insulators that were replaced the same sort of insulators that were used before?—Yes, the same kind.

1968. In your representation you took objection, did you not, to the system of porcelain insulators?—Yes; I said that they were too fragile in my report to Colonel Kemball, and he recommended, as the porcelain ones broke, to put in stronger insulators. Siemens's insulators have never broken; the insulation is not so good, but still it is good enough for a country like Turkish Arabia and Asia Minor, where it is so very dry.

1969. Are the porcelain insulators continued the whole way from Constantinople to Bagdad?—Yes.

1970. But not from Bagdad to the head of the gulf?—No; Siemens's double insulators on cast-iron arms are used from Bagdad to the head of the Persian Gulf.

1971. The convention provides, does it not, that in the case of the English wire becoming out of order, the messages shall be sent by the other wire, the second wire?—Yes.

1972. Is that course followed out?—Yes, I believe that is done, as far as it is possible; they do very well in that way; they are very accommodating, they never object to it.

1973. Have the Government messages priority, or do they send public and private messages according to their order?—Supposing the English wire were broken, and we were sending work through the other wire, the Turkish Government messages would certainly take priority over ours.

1974. I am

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1974. I am speaking now of the Indo-European public and private messages; have the messages of the English Government priority of despatch over the English wire?—I do not know; I do not think they have, but I cannot speak positively on that point. It was very few messages that the English Government had sent up to the time when I left Bagdad; but I scarcely think they have priority, I believe they take their turn with other messages, as far as I know.

1975. With regard to the track of the line through Asia Minor, in the first place, the track from Ismid or Angora to Jyzgat and Sivas is not the caravan line, I believe?—No; it is a cross-country line, not the post road.

1976. Did you make any objection to that when you came through the country with Colonel Kembal?—We did not make any objection to the route the line took, as far as its not being on the post road was concerned, because the route that we went was good. There is a beaten track through that part of the country; but we objected to the route that the line took, inasmuch as it went straight across the country, through ravines, and over mountains, and through alleys, instead of taking a more circuitous route and keeping the beaten track, where it could have been gone over at any time of the year. When we went it was in the middle of the winter, and the snow was deepest then; Colonel Kembal was very anxious to see it at the very worst. We went comparatively easily; of course we were deep in the snow, but still you could go over it at any time.

1977. I presume that really the worst part of the line in winter is the bit between Kerkuk and Diarbekir?—There is a very bad part there, but it does not go over the Maharab Dagh, it goes through the other mountain pass. The snow is very deep, and there are 12 huts placed there for the men to live in. Colonel Kembal had objected to that route very much; he went and saw it, I did not; but still he thought it was not sufficiently bad to have it altered and brought over the Maharab Dagh. There has never been any break or stoppage since the line was up, and therefore I do not think that there is any particular objection to the route.

1978. But, considering that the line from Diarbekir through Syria to Alexandria would avoid the great natural difficulty of the snows in Asia Minor, do not you think that it would be of great importance to have that as an alternative line?—Most decidedly. If the Turks would work that piece of line up to our requirements it would be a great benefit, and it would always keep us open in the winter time. Of course, through a country like Asia Minor, there must be a certain fear of the line being broken down, as there is so much snow.

1979. And as there is an article in the convention stipulating that any modifications that might appear useful should be subsequently introduced, you think, do you not, that it would be very desirable to bring the line, so far as Turkey is concerned, from Diarbekir towards El-Arish, under the same conditions as the Indo-European line?—Most decidedly it would be much better in every case where that could be done.

1980. With regard to the line between Diarbekir and Mosul, I believe it goes through Djubeltore and not down in the plain?—Yes, it keeps up on the high ground.

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1981. Is it in good working order generally, in that part?—Very good. It is a very rough road, but it was taken that way to avoid the Arabs, and it is a very difficult country to get over.

1982. It goes through Midijad, does it not?—Yes, but it is kept in very good working order. There is no snow to contend against. It is merely just a rough country, and the line men are very close in that part.

1983. I believe that you stated that there is no danger from the Arabs anywhere, except in the lower country; have there never been any difficulties between Mosul and Bagdad?—When the line was first opened there were.

1984. I believe that a subsidy, or black mail, is paid to those tribes still, in order to induce them to respect the line of telegraph?—I am not certain whether it is still kept up or not. It was done, I know, but whether it is still going on, I do not know. There is nothing paid below Bagdad, not a penny; but whether the Shahmur receive anything I do not know; but, at all events, the line has never been touched since the first opening of it.

1985. Has there never been any interruption?—Speaking from memory, it must be about two years ago, I think, that they broke the wires, but they did not do much harm. And just before we went down in 1860 they had knocked a few poles down; but there has been nothing very serious done.

1986. With regard to the lower portion of the line, of which you have given some very interesting evidence, you are aware, are you not, that in the first instance it was proposed to carry the line down the Tigris, and that wires were actually laid as far as Koot?—Yes.

1987. Has that wire been all taken up again?—Yes, it was taken up.

1988. You also state, do you not, that you consider the Euphrates line to the very much more safe as regards the Arabs than the Tigris line?—I think so; in 1864 most decidedly I should say that that was so.

1989. And you attribute that mainly to the power of the Sheikh of Montefidje?—Yes.

1990. But the worst part is out of the jurisdiction of Montefidje, between Diwanieh and Samara, where you have the Khuzil and the Ali Biage?—But still the Montefidje has some power, I believe.

1991. There is no black mail paid to the Khuzil?—No, not a cent all through.

1992. At present the country is quite tranquil through Diwanieh and Khuzil?—Yes.

1993. There is a Turkish garrison in Diwanieh, is not there?—Yes, and at Sumara now.

1994. Does that line go through Sumara?—No, it keeps on the east side of the river.

1995. It goes round the lake, I suppose?—Yes.

1996. You have stated that the river now above Suk-esh-Shiueckh overflows its banks?—Yes.

1997. And it forms a large marsh?—Yes; we keep away to the left; to the eastward of Suk-esh-Shiueckh; we keep on the high ground to the eastward of the river.

1998. But in so doing you come nearer to the Arabs of the Jubbel Shamur?—Yes; but I do not think they come across there at all. I never heard of it. The line has never been touched at that part by them. If anything does happen to

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the Montefidje Sheik there is a chance of the line being injured.

1999. Are you not aware that in that particular part of the country the normal state is revolt?—Yes, I am.

2000. It is a perfectly exceptional case, is it not, to find the Montefidje Sheik in such power as to be able to keep the Arabs in order about the junction of the Tigris and the Euphrates?—I think that during the last 18 months, since we started with the line, and since the present Sheik has been Sheik, they have been in a more quiet mood than they have been for many years; I have heard so. He seems to manage them well, and it is to be hoped that he will not be removed, but of course there is no certainty in it. The Pasha of Bagdad, Namuck Pasha, is not very likely to remove him, I think.

2001. Is Namuck Pasha favourable to the telegraph now?—I can scarcely say whether he is or not; he gave us a great deal of trouble while we were constructing it; he did not put any actual obstacles in the way, but he gave us a great deal of trouble; he did not want us to interfere in the matter.

2002. Have you any repeating stations between Bagdad and Fao?—We repeat sometimes at Diwaniyeh, but not always.

2003. And have you a signaller at Diwaniyeh who understands English?—He is just as good as the rest of them; he understands English very imperfectly.

2004. The arrangement provided for in the convention is to this effect—the Turkish government engages to appoint a staff at all the stations along the line between Constantinople and Fao, possessing a knowledge of the English language sufficient for the perfect performance of that important service; are you of opinion that that provision is carried out?—I think it is not; they do not understand the English language sufficiently well to do their duty properly, and that is a great drawback.

2005. Who are the people that are actually employed in transmitting messages; are they Armenians who have learned English at Constantinople?—Yes, Armenians, Greeks, and some Italians.

2006. Are there no English at all?—There is one Englishman at Bagdad, another at Sivas, and another at Diarbekir; they were appointed, as I have stated before, by Colonel Stewart, to examine the messages, to see if there were any faults in the messages when they arrived at those stations; they were not appointed to send messages, but that arrangement has not been carried out, and they have never done that duty.

2007. It is also stated that, "It's officers" (that is to say the officers of the Turkish government), "and especially the station master, shall be selected from the Ottoman telegraph officials, who are thoroughly conversant with the English language;" so that the station master at every one of the great stations between Constantinople and Fao ought, according to the terms of this convention, to be thoroughly conversant with the English language?—Yes.

2008. At the whole of the 11 stations that you have mentioned, is that provision carried out?—No; they do not understand the English language sufficiently well to carry on the telegraphic business; that provision is not complied

with, and that is what I have said all along, is the great drawback to the Turkish line.

2009. Are you aware whether there has been any pressure put upon the Turkish government to carry out that engagement?—Yes, I think so; I am aware that the English Government have been doing all they possibly can to get it carried out.

2010. And to what do you attribute their failure?—I imagine it is one of those things which it takes the Turks a long time before they will move in the matter; I have no doubt it will be done eventually; I think it is only a matter of time.

2011. Are you aware of any foreign pressure being exerted in the contrary direction?—I have heard that the reason why they have not allowed us to have English signallers has been on account of the pressure from foreign Governments, from France and Russia, but whether it is so or not I do not know; I have heard that that is the case, and I think it is quite likely; however, the Teheran line will always be a great advantage in the same manner as the Diarbekir and Beyrout line will be; in case anything does happen in the Arab district, we shall have the Teheran line to fall back upon.

2012. With regard to the line through Persia, is it arranged at Bagdad and Bushire respectively, whether messages shall come by Bussorah and Diwaniyeh, or through Persia, there being two alternative lines?—The arrangement is, that one half of the messages go *via* Teheran, and the other half *via* Fao.

2013. Both coming and going?—Yes.

2014. That is to say, half of the messages daily?—Yes, half of the messages daily; but that has never been carried out for this reason, that there has been only one wire in Persia, and for 12 hours in the day it has been in the hands of the Persians to work, and we have only had the line the other 12 hours, therefore we have never been able to send from Bagdad half the work by Persia, and the Turks have always got three parts of it, for that reason.

2015. Are the messages sufficient to keep the wire constantly working on the Turkish line?—Up to a short time back I heard that they were working fully, but they had a long break down, and people got frightened of it, I suppose, and then there was not work sufficient. But at one time there were 100 and odd messages passing through Bagdad daily.

2016. And you work day and night?—Yes; the offices are open 24 hours, and the clerks are supposed to work, but they do not work at night; they go to sleep.

2017. There is a statement contained in a report of Mr. Courtenay from Constantinople, dated the 21st of February last, saying "on the 8th instant," that is to say, on the 8th of February, "I sent a message direct," that is from Constantinople to Kurrachee, the acknowledgment of which was received here," that is, back at Constantinople "three minutes afterwards." Did you ever hear of this circumstance before?—No, I have not heard of it.

2018. Do you think it possible?—I suppose that at certain times it would be.

2019. As the message has to go to the east, and return from the east to the west, the one longitude corrects the other?—Yes, precisely.

2020. That allows simply three minutes for the whole distance from Constantinople to Fao, where

where it must have been repeated, and to Kurrachee and back to Fao and Constantinople?—It is very quick indeed to have done that. However, if they were all ready and looking for it, it might be done.

2021. What is the quickest time that you are aware of from Constantinople to Fao?—We have many times sent messages direct, which have gone just as quickly as we are now talking; and it would be done always if they would look after their instruments. On two or three days of the week they work direct if they can get the clerks in a humour to look after their instruments; but on the other three or four days they will not adjust their instruments, and consequently they cannot send through relays.

2022. Do messages generally come direct from Kurrachee to Fao, or are they repeated in the

interval?—They are repeated generally; Mr. Walton is here, from the Persian line, who will be able to tell the Committee more about the Gulf line than I can, but I believe the messages are generally repeated.

2023. You have not personally visited the Persian line?—No, not personally; I have not been on the Persian line at all; I have been exclusively in Turkey, between Fao and Constantinople.

2024. *Chairman.*] In the case of that message which went through in three minutes, it had to be repeated at Fao, had it not, by word of mouth?—Yes, it had to be repeated at Fao both ways; therefore I should think it must merely have been an acknowledgment of having received the message, and not an answer to it.

HENRY WALTON, Esq., called in; and Examined.

2025. *Chairman.*] YOU are in the Telegraph Service of the Government of India, are you not?—Yes.

2026. In what capacity?—I was appointed to the telegraph in India at the end of 1856, as assistant in that department. When the Court of Directors sent out 60 gentlemen to India to reorganise the Indian department, I was one of the first four who went out.

2027. Where have you been employed in India?—In Bengal and the North Western Provinces, and in the Punjaub.

2028. Have you been employed in the Persian Gulf?—Not in the Persian Gulf itself, but in the Persian department; in constructing a portion of the Persian line, from Kermanshah to Teheran. I have also visited stations in the Gulf, and know somewhat about them.

2029. Then your experience has been rather on the Persian part of the line?—Yes; since I left India I have been entirely in Persia.

2030. When did you leave India?—In 1862.

2031. What is the condition of the line in Persia with which you have been connected?—I think the line in most parts is very good. From Khanikeen on to Teheran, and Teheran again to Abadeh, which is half way between Ispahan and Shiraz, the line is as good as it can be, and well insulated. Siemens' insulators are used; we procured very good poles from the Persians, and that part of the line is worked very well; but between Abadeh and Shiraz it is a very bad country; that is to say, there were very few poles to be got, and the Governor behaved very badly; he got a certain amount of money from the Shah for the poles, about 7*s.* or 6*s.* 6*d.* for each pole, and he only spent 2*s.* or 2*s.* 6*d.*, and consequently the poles are very bad, and this winter they failed. The line was taken through a defile where the snow collected, and for five weeks the road was impassable. I sent two or three inspectors, and they were obliged to return. We then sent a number of villagers down, and they could not get through. At last our inspector managed to get through and restored the line, and it has worked well since then; that is about six weeks since.

2032. Is that defect likely to occur in the winter season?—No, not the least. They say it has been the severest winter they have had for

60 years in Persia, and we now know where the bad part is, and the line will be immediately altered. We have sent out men with orders to change the line immediately, and, instead of taking it in the valley, to take it on the tops of the hills, which has been chiefly done in Persia.

2033. Have you had anything to do with the service of the cable between Kurrachee and Fao?—I have not been actually employed on it, but I have visited their offices and stations, and have been frequently there and have seen how the work is going on at the different stations.

2034. Have you heard it stated that a message had been sent from Constantinople to Kurrachee, and an answer had been received in three minutes?—Yes; I was in Constantinople a few days since when that was done. Mr. Courtenay and Major Champain mentioned to me that it had been done the morning I was there. I was not actually in the office, but I can perfectly believe that it was done. I do not know whether they repeated the message at Fao, and then transmitted it on, or whether they sent it direct through the cable, which I think was hardly advisable or possible. The message must have been very short, of course; it must have been an almost instantaneous communication. Constantinople was working regularly with Fao during the eight days that I was in Constantinople, and they said that lately it had been done regularly.

2035. How long ago were you in Constantinople?—Ten days ago.

2036. Do you think that the Persian line, as you have described it, presents a useful alternative in the event of the line from Bagdad to Fao direct being interrupted?—I think it does, very much so, especially when we get up the second wire, which is being now shipped for Persia. It never failed in the summer. The weather is so favourable for a telegraph that even if the posts give way we could work very well if the line were on the ground. I worked with the line for 14 miles on the ground before the line was erected, and all the wire ran out, there being no rain there for seven, eight, and nine months together. The air is so dry that I think the country is very favourable for telegraphy.

2037. Are you acquainted with the line between Teheran and Tabriz?—Yes; I looked carefully at that line as I came along. I was asked to do so by Major Smith. That line is entirely in the hands

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hands of the Persians themselves; but, owing to strong representations at Teheran, and Mr. Alison constantly telling them of it, they have got three Englishmen and two or three Frenchmen for the Tabriz service with Russia, and there are two or three Frenchmen stationed at Djoulfa, which is on the frontier between Russia and Persia. There are two or three at Tabriz, and again two or three at Teheran, distinct from our staff altogether, and they are paid by the Persian Government, with a view of keeping up the communication with Russia, with whom they have recently made a treaty on the subject.

2038. You are probably aware that last year a good many messages were forwarded from this country to India, by way of Russia, with the intention of being forwarded over the line which you have been describing, by the Persian Gulf?—Yes.

2039. And the result has been very unsatisfactory. Does that want of satisfaction, as far as you know, lie in Persia or in the Russian system?—I heard the Russian Minister at Teheran say, that when those messages were started from London the Russian line had not been opened by the Government for service. Those were the first messages that were sent, or attempted to be sent, through the line, and some of them took six weeks in reaching Teheran. The Russians themselves did not desire the messages to be sent; but, after that time, that is to say since October last, the Russian line has been working wonderfully well. We used to get messages from London in six hours, and seven hours by Russia, and I think the line has worked excellently.

2040. Do you know what route messages take after leaving Berlin, for instance?—Through St. Petersburg and then to Moscow, through Nizni to Novogorod, to Bakoo, and so to Tiflis, and so to Djoulfa, and so to Tabriz; we always use that line in preference to the Turkish line. In Teheran when wishing to telegraph to Europe the French Minister and the English and Russian Ministers use it in preference to the Turkish line, because we find that we always get replies quicker.

2041. Is there any jealousy on the part of the different European Powers in Persia as to the matter of control over the wires?—The Russians were said to have endeavoured to hinder the English staff at present employed in Persia from being allowed to remain there; but when the great advantage of the line between Djoulfa and the Gulf being well managed was pointed out to the Russians, they immediately turned their minds towards getting their own line in good order, and to reaping the benefit of being a link in the line between England and India, with the view of getting messages for themselves.

2042. Do you think that if a message were given in to-day at the office of one of our telegraph companies here, with a request that it might be forwarded by way of Russia to Teheran, it would reach there in a reasonable time?—I think it would reach within 12 hours; they were doing so when I left Teheran. The recent delays which have taken place no doubt were on our line in Persia; we got messages from Russia in six, seven, and ten hours, but we could not forward them on; our own line was broken between Ispahan and Shiraz. The fault recently has lain quite on the Persian line, but I am of opinion that the

Russian line will be one of the lines to India and one of the best; they are said to have Englishmen almost entirely employed on their line; they are very liberal in payment and in their general management.

2043. Did you hear the evidence given by Mr. Greener with regard to the management of the line between Constantinople and Bagdad?—Yes.

2044. Do the same difficulties exist on the Persian system?—No; they do not exist there, because the staff is paid by the Government of India. We have English clerks at Teheran and at Kermanshah, and at all the repeating stations; the only difficulty is in the system of guarding the line; that has been a point in dispute ever since we have been in Persia; but by the recent treaty made in Persia by Mr. Alison that is still unsettled, and we are still not allowed to have the management of the line guards, that is, not exactly the management of them, but the payment of them; because if the Persian Government paid them, or said they would pay them, they never did, whereas if we paid them they would be sure to get their money, and they would do their work; that is really the difficulty which exists with regard to the Persian line, for the villagers or the people in the country never molest the line, and the Persian Government is very anxious indeed to keep the line in good order.

2045. But they will insist on keeping the control of the line in their own hands?—Yes; they will insist upon keeping the control of the line guards in their own hands; in fact, they said candidly, that they did not like us to have 100 or 200 horsemen in our own hands in Persia.

2046. Sir Charles Bright.] What are the places where you state that the Russians have Englishmen employed on their lines?—They have two, I know, and we have generally heard that Englishmen were employed throughout the Russian line. Two men left our department and went to Russia and they were employed at once; they were two signallers, who had been many years in our employ; they were not dissatisfied, but they had an idea that they should better themselves by going into the Russian service. There is one man between Tiflis and Bakoo, and Tiflis and the frontier Djoulfa; and we find messages come very correctly by that route.

2047. How is the line between Teheran and Tabriz working now?—It worked very well indeed during last winter; it has been one of the best working lines in Persia, but I think it might be improved; the insulators are not very good; they bought the wire from the Russians, and insulators, as well as the instruments, and they are not so good as those that we have on our own line.

2048. Do you think that if we tried the experiment now of sending 100 messages by way of Russia we should meet with a successful result?—I think so, decidedly, as far as Teheran.

2049. Sir Henry Rawlinson.] You mentioned something about the Russian Treaty; you were alluding, I presume, to the Russian Government having recently made a convention with Persia about the line between Teheran and the Russian frontier?—Yes; I have not seen the treaty, but I am perfectly aware that it has been made; I have heard it mentioned by the Persian Director of Telegraphs.

2050. Is that with a view of giving the Russian Government

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Government control over that line, or an interest in it?—Not the least; it is more with a view to insisting upon the Persians keeping it in good order and as regards the tariff.

2051. Do our officers work harmoniously with the Persians in the conduct of the line?—Very well indeed; the control is with the English superintendents, and if there is any dispute it is referred to the two directors, the English and Persian; but we have worked three years, and I have never known a case of a quarrel or anything of that kind with the Persian telegraphic officials; they are very willing indeed to learn, and they have learnt to signal and work the instruments, and under our direction they do very well. The Persians employ the line a great deal themselves; they have no post, and formerly they sent their messages by footmen, and now they send them by telegraph.

2052. At present there is only one wire throughout Persia, from Khanikee on the frontier, by Teheran to Bushire?—Only one line.

2053. Through that line messages are sent indiscriminately, that is to say, Indo-European and native messages?—Yes, and also the Turko-Persian messages; that is to say, between Constantinople and Persia.

2054. Are they all sent indiscriminately?—Yes.

2055. But when the second wire is put up, that is to be reserved exclusively, is it not, for the Indo-European messages?—Exclusively for the Indo-European messages; and we can work regularly from Bagdad to Bushire, which is about 1,250 miles, instantaneously.

2056. How often do you usually repeat between Bagdad and Bushire?—I think, when I was in Persia, perhaps half the messages were repeated, and half of them were sent direct from Bagdad to Bushire, not halting in Persia at all.

2057. Have you had no difficulty in the mountains between the frontier and Hamadan, the Elwend mountains?—No; the line has lasted very well on those mountains.

2058. I mean with regard to snow?—No, we have not had so much difficulty there as on the high plains, where the snow appears to lie; over the mountains it does not; it blows off. I erected the line over the Hamadan mountains.

2059. Did you follow the post road?—Yes, we followed the post road always.

2060. Are you aware that at present that line is in good working order?—Very good indeed; from Khanikee to Abadeh, which is below Isphahan, the line has worked very well indeed, and it had been repaired to Bushire before I left. As I stated, the poles were bad there, and gave us a great deal of trouble, but the Shah had given orders that every pole should be removed and better ones put up.

2061. *Chairman.*] Are you able to give the Committee any information with respect to the working of the telegraph lines in India?—Yes; I served for six years in India, in the Indian Department.

2062. That was some time ago, was it not?—Three and a half years ago; but I was in India at Bombay, nine months since, and also at Kurrachee for some little while. I was there on duty to obtain clerks for the Persian line.

2063. Did you get any from the Indian service?—I got them in Bombay; they were all men who had been trained in the Indian Department, but who had resigned.

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2064. Do you know why they had resigned?—Because they were not sufficiently paid in most cases, and they disliked being overworked.

2065. Were they men of some experience?—One man whom I engaged had been 11 years in the Indian Department, and he was very glad to be employed in Persia at 160 rupees a month. He had been in charge of the Bombay office, one of the largest offices in India; and I heard him speak of it, saying that he was very much discontented with the hard work which he had and the small remuneration.

2066. When you were at Kurrachee, nine months since, did you hear anything there of the discontent which seems to prevail generally in India, as to the manner in which the services were performed?—Yes; I visited the Kurrachee office; I knew Mr. Gordon, the superintendent of the Scinde circle, and he told me that it would be impossible to do the extra work brought on by the Indo-European line, because he had no extra staff allowed him for that purpose; and also that in some places, at Deesa for example, which is one of the points of communication, they had only one clerk to three instruments; and at one time when I was at Kurrachee there were over 200 messages on hand, this clerk having to attend to three different instruments at a time.

2067. To what do you ascribe the difficulty of getting clerks in India; is it to the inadequacy of the pay, or to indisposition to the work?—Entirely to the small pay that is offered. The Indian Telegraph Department is used by young men, whose parents have brought them up in India, as a sort of school. Those lads join the department when they can hardly read or write; and they learn to read and write, and they get a little sharp, and when they have served two or three years they go away and get something else to do. They make use of the department, because when they have learned to signal, and have become practised a little in the office work, the Government does not give them sufficient pay to induce them to remain in the telegraph service, and they go elsewhere.

2068. Do they go into other employments not necessarily telegraphic?—Any employment; as apothecaries, or clerks in mercantile houses, or anything they can get to do. I may remark that I consider that one of the greatest causes of the mistakes that are made on the Indian lines, is the employment of what they call sounding instruments, that is to say, instruments where the tape is not employed. The messages are not printed upon paper at all. They have instruments now in the Kurrachee office, where they read at the rate of from 32 to 35 words a minute, and they must do so very incorrectly, as the message is not printed at all on paper.

2069. *Sir Charles Bright.*] Do not you know that in America the use of paper has been entirely abolished, and that the sounding instruments are used everywhere?—Yes. If the clerks are very good, and are men who have had a fair education, which very few signallers in the Indian telegraph service have, perhaps they may be able to do it better; but I am sure, from what I saw in the Kurrachee office with those sounding instruments, and the number of messages that they have on hand from the Indo-European line, and with their large local traffic, it was utterly impossible, at the rate they were working, that they could do the thing at all satisfactorily.

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2070. A great

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2070. A great many of the signallers employed in the telegraph department in India are half-caste, are they not?—Yes, half of them, I should think.

2071. What is your opinion of their scale of education?—As a rule, their penmanship is very good indeed; but they are very slow, lazy, and deceitful, and not to be trusted at all in keeping messages secret, which is so desirable in India.

2072. And there are many complaints, are there not, in India in respect to that very subject of divulging information from messages?—Yes, a great many. It is almost impossible that messages can be kept secret from the public that are intended for one person.

2073. In fact, a message for a European merchant is generally known in the bazaar before it reaches the merchant's office?—Yes, I am sorry to say it is so.

2074. Do you know anything of the state of the lines themselves in India, as regards construction?—In the North West Provinces, from Agra up to Lahore, and from Agra to Benares, and Agra to Indore, they were destroyed in the mutiny and put up again in a very hurried way in order to re-open the communication, which was of great importance; and in many cases there were no insulators at all; and I believe that the new insulators which have been introduced lately on Hamilton's poles are found to be very faulty. In fact, I have heard on the Mekran line they could not work two wires at a time, and very frequently they could not work one wire at all.

2075. Are those known as Brooks's insulators?—I have heard them called Douglas's insulators. I think they were an improvement by Colonel Douglas on Sir William Brooks's insulators.

2076. But they are very bad, at all events?—I think they are very bad.

2077. Do you know anything of the state of the line between Kurrachee and Bombay?—Yes; it was described to me by the superintendent, and it was reported generally, in the papers, to be very bad when I was in Kurrachee; and I saw messages remaining in the Kurrachee office for 12 and 14, and perhaps 20 hours, owing to interruptions on the line, which goes through a very difficult tract of country, and owing to a deficiency in the number of clerks.

2078. It passes over a swamp, does it not?—Part of it goes through the Run of Cutch, which is a very difficult country; I have not been over the line myself.

2079. Do you know anything of the line between Bombay and Calcutta?—The line between Agra and Indore, which is one of the chief pieces, and also between Agra and Benares, I know very well, and it was in a very bad state indeed when I left India.

2080. What time does a message take between Bombay and Calcutta?—It all depends upon circumstances; sometimes they pass through in two hours, and sometimes they take three weeks, it is so very uncertain. They have no system of guarding the line; if the line broke it was a question who should mend it, or how it could get mended.

2081. To what cause do you attribute the bad working of the Indian line?—I attribute it a great deal to the dissatisfaction that exists throughout the whole department, or that there was when I was there; and I have heard from private sources that it continues, but I cannot speak personally; it is from the centralisation

system, in fact, a man being unable to act on his own responsibility in any part of the department, and always having to refer to Calcutta.

2082. What is a station master allowed to do upon his own authority; what can he purchase?—I do not know what a station master can purchase, but a superintendent, who is of a much higher grade, can purchase nothing; stores for Kurrachee, such as blotting-paper, pens, sealing-wax, and things of that kind, are sent from Calcutta to Kurrachee, and also to Peshawar, I believe. Also when I was in Bombay, and leaving for Persia again, about nine months since, I required for the officers in Persia some small galvanometers and needles such as are used in India, and are very useful for inspectors on the line for testing the line; and I telegraphed to Colonel Douglas and asked him if he could allow me to take those stores from his store department in Bombay. He replied, certainly, that the superintendent would give me whatever I required; so I went to the store department, and said, that I required so many, 30 I think it was, magnets, so many needles, and coils, and other things, and maps of the telegraph in India, which I thought would be useful in Persia for the Persian Department; but he said, "I can give you nothing at all; I have got nothing, and can get nothing." So I telegraphed back to Colonel Douglas, and those things were sent to me from Calcutta to Teheran; but they are such things as no office should be without, or could hardly go on without.

2083. Lord Robert Montagu.] Has there been any instance, since 1861, of cutting the wire in order to send a falsified message on?—I believe there has been, but I am unable to state any particulars; I have merely seen it in the newspapers. I may mention that another great source of discontent in India is the long time that the signallers are kept on duty; in fact it almost amounts to cruelty, I think; 14 hours or 12 hours at a time they are kept at the instrument, and in that hot climate it is impossible that young men can work properly for 12 and 14 hours at a time.

2084. Mr. Moffatt.] What is the usual pay of manipulators on the Indian line?—When I first went to India they were engaged at 16 rupees a month.

2085. At the present time, what is it?—After six months, by which time they will have learnt to work the instruments, their pay was raised to 30 rupees. At the present time I am unable to say what it is; but before I left India I engaged nearly 100 signallers for the department in India, and I, against orders, gave them 35 rupees a month to start with; that is to say, I got rebuked afterwards for doing it.

2086. Can you inform the Committee what is the amount paid to manipulators on the Indian lines of telegraph?—I believe 60 rupees a month is to be the lowest by the new scale.

2087. When is that new scale to come into operation?—I am not sure whether it has been sanctioned by the Government.

2088. What is the rate of pay for a similar service on the Persian telegraph?—One hundred rupees a month is the lowest.

2089. Can you inform the Committee what the station master's pay is on the Indian service?—They have no system of station masters; the senior signallers often did the work and received no remuneration for doing it; at some offices, such as Bombay, Calcutta, and Agra, there was an extra allowance

allowance, called the personal allowance, given for doing that duty, attached to the signaller's pay, whatever that pay might happen to be at the time; that allowance was 50 rupees a month in Agra, and 75 in Bombay.

2090. Are the Committee to understand that in the general system of the Indian telegraph there is no station master or chief to have control over the persons employed?—There is always a senior signalsman, who is called the assistant in charge, but he merely happens to be the senior man at the place.

2091. He is paid, I think, you say, a slight increase upon his pay as a signaller, by reason of his somewhat increased responsibility?—In some offices he is, and in some he is not.

2092. What is the system pursued in the Persian telegraphic department?—In the Persian department the pay of the head clerk, or, as he is called, the clerk in charge, is from 180 to 200 rupees per mensem, and an allowance of 25 rupees per mensem for taking the charge in all stations except Bushire, which is particularly unhealthy, and therefore it is 50.

2093. Is there any material difference between the rate of charge for the transmission of messages along the Persian line and the Indian line?—The rate of charge in Persia among the Persians for their local messages is at so much a word, so many shais per word; but in India, when I was in India, it was two rupees a message; but it has been recently altered to so much for 20 words; there is no local traffic in Persia for European messages.

2094. For a message of 20 words, what would be the difference of cost between the Persian telegraph and the Indian telegraph?—There would be, I think, a difference of about nine on every 20 words in favour of Persia; it is entirely a system of the Persians themselves for Persian messages; messages in the European languages are prohibited on the Persian lines by the Persians; they say that if people wish to telegraph in Persia they must send in the Persian language, and they have clerks who perform the duties efficiently.

2095. The whole of the messages that affect English interests that go through Persia have to be translated, have they not?—No, not at all; all European messages are sent by English clerks in the language in which they come; but Persian messages between Shiraz and Ispahan, and between two Persian merchants, are carried on in the Persian language by Persian clerks.

2096. But for all foreign messages the Persian telegraph system provides that they shall be transmitted in the language in which they start?—Yes.

2097. In India, what is the custom with regard to the language in which a message is transmitted; has the Government of India established any regulation in that respect?—It has been decided, after some talk upon the subject, that a message shall not be translated at Kurrachee; it was wished at first by the Indian telegraph department that messages should be translated there.

2098. So that messages coming from Europe go *via* Kurrachee to Bombay, or Calcutta, in the language in which they start?—Yes.

2099. And in the internal telegraphic communication, what is the regulation?—It is entirely in the Roman character.

2100. They do not allow the various dialects

of the country to be used, do they?—No, not at all.

2101. Can you give the Committee any information as to the revenue of the Indian telegraph?—I am only able to speak as to what happened 3½ years since; but when I left India the revenue was, I believe, about 40,000 rupees per mensem, but I cannot state it accurately; no doubt it has vastly improved since.

2102. Did you make any recommendations to the chiefs of the telegraphic administration in India, with regard to the lowness of the pay and the inferiority of the service, which you stated to the Committee obtain in India?—I was despatched from Calcutta to Merut, by Colonel Douglas, to engage 100 signallers for the department in 1861; and I was authorised to give them at the rate of from 20 to 25 rupees per mensem. On my arrival there, I found that I could not get anybody for that sum; and therefore, on my own responsibility, I gave them 35 rupees per mensem to start with, and I promised them an increase according to the manner in which they did their duties; but Mr. Galbraith, who was then at Agra, was displeased at this, and reported me for so doing to the director general, who was however, obliged, after I had committed myself in writing to the relations of those boys, to give them the pay that I had promised them.

2103. Can you inform the Committee what is the general pay of European clerks in mercantile offices in Bombay and Calcutta?—One hundred and sixty to 250 rupees per month, as mere writers.

2104. *Chairman.*] Did you restrict your inquiries for servants entirely to Europeans, or lads of European descent?—No, not at all; natives of India are not allowed to be employed in the telegraph.

2105. Why not?—I suppose from their untrustworthiness.

2106. By whom are they not allowed to be employed?—The director general does not authorise natives of India being taken on in the same way as I took on those 100 clerks at that time.

2107. Are there no natives of India, that is to say, no Hindoos or Mahometans, in the telegraph service?—Not that I am aware of; not in the part of India in which I was, in Bengal; I am sure there were not; but they are East Indians, who are not quite natives perhaps, though very nearly so.

2108. *Mr. Childers.*] Are Urasians allowed to be employed?—Yes; the class of boys who are employed in India as signallers, when they first join the department, are such as in England would get nothing to do; they would not get bread-and-butter even.

2109. *Mr. Moffatt.*] At what age do you engage those signallers?—From 12 to 16 years of age.

2110. *Sir Henry Rawlinson.*] Do you know anything of the cost of telegraphic communication through Russia; I mean the expense of sending a message of 20 words from Teheran to London, *via* Russia?—Yes, it is 38 krauns, which would be about 33s.; it is cheaper than by the route through Turkey.

2111. Can you state what the amount would be from Teheran by Bagdad, that is to say through Turkey?—I am not sure what it is; it has been altered two or three times; but I know that

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H. Walton, Esq. that the route through Russia is cheaper than the route through Turkey, because I sent two messages myself.

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2113. What is the proportion to Teheran; is it half; is it 7s.?—No, it is not half; it is seven krauns to Teheran, and nine on to Bushire. The Persians have a separate treaty with Turkey for messages between Persia and Turkey; and they have a separate treaty with Russia for messages

between Persia and Russia, and they have a separate treaty with us.

2114. Have you heard anything of a proposal to continue the telegraph direct from Tabriz, by Sivas, to Constantinople?—I heard it mentioned, and that is all. In the same way I have heard mentioned an extension of the line from Ispahan, by Yezd and Kerman, to Bunder Abbas, which would make a continuous land-line to India. I believe the land line from the Mekran coast is already being extended.

CHARLES ADLEY, Esq., called in; and Examined.

C. Adley, Esq. 2115. *Chairman.*] ARE you a Civil Engineer?—I am.

2116. You have had considerable experience in the matter of telegraphs in India, I believe?—Yes, both in this country and in India.

2117. In what capacity have you been employed in India?—I joined the East Indian Railway in 1853, as one of their engineers, and had charge of the construction of one of the first sections of that railway at Burdwan; I was there about two years.

2118. How long did you remain in the service of the East India Railway Company?—I think it was eight or nine years altogether. After I had been at Burdwan, I was requested to take charge of the telegraph in addition to my other engineering duties.

2119. You did not go out in the telegraphic employment of the railway?—No.

2120. During the time you were in India you had the responsible charge, I believe, of the telegraph service of the railway company?—Latterly I had entirely the distinct charge of it.

2121. And of the construction of the line?—And of the construction of the line throughout.

2122. Had you any opportunity during the time you were so employed, of comparing the system of telegraph on the East Indian Railway Company's line with that of the Government?—On one occasion the question was discussed; it was stated that it was not fair to compare the East Indian Railway telegraph with the Government lines, because the Government lines passed through primeval forests, swamps, and all kinds of places, whereas the railway line passed alongside the railway, and in consequence was easier of access for repairs and supervision, and that the circumstances were totally different; but in answer to that question, I just took the previous month and compared a section of the East Indian Railway line with a section of the Government line which passed side by side with it up to Bhagulpoor and Moughyr; during that period, for eight days the Government line was in working order, and for the remaining 22 it was out of order; but during the whole time the East Indian Railway was forwarding 500 messages a day, which proved satisfactorily that the difference was not due entirely to the difficulties of effecting repairs.

2123. Do you draw a great distinction as regards the convenience of inspection of the telegraph between a line of telegraph which goes across the country and a line which follows the course of the railway?—Of course, for the convenience of repair, the line going along the railway is certainly very much better; but I

merely mention this to show that the causes of failure and of interruptions on the Government lines are not simply to be attributed to that one fact; that is my only reason for mentioning it.

2124. Had you an opportunity of forming an opinion generally as to the manner in which the Government telegraphic service was performed?—I had constant contact with different officers of the department, and it was constantly brought to my notice, and I must say that it was very indifferently performed; I found it so on any occasion that I had to use it. On one occasion I wanted to send some important message to Galle, and the answer that I received every day for a week was that the line was interrupted, and that the message could not be sent. Another time I wanted to send a message to Dacca, and I got the same answer for several days; both the opportunities for those messages passed by, and there was no occasion to send them.

2125. Were those delays of frequent occurrence in the case of your own line?—Certainly not; I do not remember our line ever being interrupted at all while I was in India.

2126. Except during the mutiny?—We were out of the sphere of the mutinies; our line between Allahabad and Cawnpore was not constructed at the time of the mutinies.

2127. Are the instruments used the same on the two systems?—We use two kinds of instruments, we use a single needle and a double needle; and we also use Morse's; the needle we use for the intermediate communications, and the Morse's we use for the through communications. This sketch will show the Committee how they are worked—(*producing the same, and explaining it to the Committee*).

2128. How long are the lines of wire upon the East Indian Railway?—There are about 1,300 miles; there are two wires on some parts of the line, four upon others, and seven for a distance of 75 miles.

2129. Are we to understand you to state that the instruments that you use are of a different description from those that are used on the Government lines?—Not if you take the through signalling; that is to say, for the stations which will correspond with the Government stations, they are the same; they are Morse's; but for the intermediate stations they are Cooke and Wheatstone's, because Morse's would not answer. We are obliged to work through several stations together sometimes, and it is more convenient.

2130. What is the difference as to the character of the work done, as to speed for instance, between the system of the East Indian Railway and the Government system?—As regards speed, whenever we could send messages every one preferred to

to send by us, and we could send very much more quickly than the Government.

2131. Were you allowed to carry messages for the public during the time you were in India?—Just at the time I left India, that question was under discussion, but we did take them by giving rather a liberal interpretation to the permission that the Government gave us with regard to railway travellers. They allowed us to take them for railway travellers, and so we gave rather a free interpretation of the term “railway travellers.”

2132. Up to that time was there an absolute prohibition?—They would not allow us to take messages for the public in any way whatever; till at last, on one occasion, the Lieutenant Governor of Bengal wanted to send a message, and he was prohibited, and so at last the Government gave in.

2133. Out of the fourwires to which you have referred, how many are required for the service of the railway company?—I should say that the whole four of them would be required now. Two of them are required exclusively for signalling trains, and the other two are required for the ordinary messages of the railway company, which are very numerous.

2134. Can you give any information to the Committee as to the extent to which the public now avail themselves of the permission to send messages over the railway company's telegraph lines?—They avail themselves of it, when they can, very largely; but in the case of the railway lines they do not, in some instances, go into the towns: for instance, take Benares; the town of Benares is six miles away; but in the case of the town of Mirzapore, the railway, I think, take there something like 500 l. in telegrams, whereas I believe the Government only take about 300 l., at least before the railway was opened they only took about 300 l.

2135. Do you attribute that difference to the superior manner in which the service of the railway company's telegraph line is performed?—Entirely; because the natives are quite aware of the advantage of rapidity in sending telegraphic messages. In fact, I know of cases where, before we were allowed to send messages for the public, the public used to come and pay the Government and pay us too. They would send a message both ways, and of course the Government could not make any objection to that.

2136. Who are the signallers upon the railway telegraph line?—We use principally Eurasians, and natives of the country very largely.

2137. Do you use Bengalees?—Nearly always Bengalees; almost entirely, I may say, and we employ a few Mahomedans; we are not particular. We use either Hindoos or Mahomedans without distinction. They have to pass an examination in reading and writing before they join.

2138. It was stated by the last witness that, during the time he was in the employment of the Government, the natives of India, as contradistinguished from what we call Eurasians, were excluded from the Government service; are you aware of that being the fact?—Yes; I believe they did do so at one time, and I took a few of them on when they were changing; that is to say, when they introduced signallers from this country, they got rid of a number of their native signallers, to make way for the signallers from this country, and I took a few of them on; but I found that I had to get rid of them almost at once.

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2139. What were those whom you took over?—They were nearly all natives; the Government retained all the Eurasians.

2140. But do you find the native to be as useful for your purposes as signallers as the Eurasians?—I think so; I think it is a work which is peculiarly adapted to the native. At first we had some trouble, but now there is no difficulty in getting signallers; we can get any number without any trouble. Before the time that the rule was passed against the natives being employed in the Government telegraphic service, I could have got anyone I chose from the Government employ; they preferred the railway employ, especially the natives, because they were not moved about very much.

2141. Was there any difference in the rates of pay?—The Government rates were higher than ours.

2142. And hence they preferred to come to the railway company?—Yes; and we paid a great deal of attention to their comforts, and we do not knock them about. A Government signaller was one day, say, at Agra, and he was sent off to Benares the next day; but we do not find any occasion to do that.

2143. I suppose the people whom you employ at your different stations are people belonging to the neighbouring town or village?—No, not in the North West, only just in the lower parts of Bengal. Nearly all the signallers are Bengalees, who have to be sent up from Calcutta. They are obliged to be in some degree educated men to understand English, and it is hard to get such men except in the vicinity of Calcutta.

2144. Generally speaking, do you find now that natives of India, especially in the neighbourhood of large towns, can both read and write English very well?—They can, but not so well as the Bengalees. The up-country natives cannot write well. I do not know any up-country native who is in charge of an office; all the offices in charge of natives are in charge of Bengalees.

2145. Have you any doubt that the railway company would be able to obtain at all times a sufficient number of signallers for such purposes?—I have no fear at all about it. I think we have something like from 500 to 600 signallers at the present moment. I have never had any difficulty; in fact, we have always more applying than we require.

2146. Have you had any reason to question the integrity of those native signalmen?—No, I have not; in fact, I have found them rather ready to peach upon each other.

2147. Are you aware that a proposal was made some time ago, on the part of gentlemen in this country, to form a company for the purpose of taking over the telegraphic service of the railway companies, so as to place the whole of India in that respect under one management?—I am quite aware of that; it originated with a proposal made by myself to the Indian Government. There was a great outcry in 1861, and the Government wrote to the Chamber of Commerce to inform them that they would be very willing to hand over the erection of a line between Calcutta and Bombay to a private company; and being in England at the time I was in communication with two of the directors of the East Indian Railway Company, and a certain proposal was made to the Government which they did not accede to. It was also at the same time

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suggested that they should remove the restrictions regarding private telegrams, and should allow the two railway companies, the Great Indian Peninsular Railway Company and the East Indian Railway Company, to perform that service, which the Government consented to do, and upon that a company was formed in this country for carrying out that scheme. I know that negotiations have been going on upon that subject ever since up to the present time; but I am afraid that beyond the bare invitation we have not got any further.

2148. Have you received an answer from the railway companies stating why the arrangement has not proceeded as far as they are concerned?—I have seen all the correspondence in India, and, as far as I can see, the objection is as to the terms. They seem in India to object to the terms; they consider them hardly fair; that is really the only objection that has been raised. The Governor General, in the Minute which he makes upon the question, does not seem opposed to the proposal on principle; he merely suggests that the company shall have power either to erect wires upon the railway standards, or to take over the railway lines altogether, so as not to have a divided authority upon the line; that is as far as I understand it.

2149. What is the general practice in this country?—The general practice in this country is that the wires are almost entirely in the hands of the telegraph companies, as far as I understand. Latterly I believe that some railway companies have been taking their own telegraphs into their own hands; but hitherto the telegraphs in this country have generally been the property, I may say, of the telegraph companies, but rented to the railway companies.

2150. The practice in this country is not, I believe, for the railway companies to use the telegraph wires for purposes of profit as between themselves and the public?—It is not the practice in this country, and I do not see how a railway company in India could carry on an extensive communication and correspondence without erecting special wires for that purpose exclusively, and having exclusive clerks for them; for a very simple reason, that whenever an accident occurs and there is an interruption, and the traffic of the line is deranged, we have to stop all public messages, every one is stopped, because without this we could not avail ourselves of the railway company's telegraph, which is then wanted exclusively for the railway; we should then be obliged to shut out all private messages, and sometimes this has occurred for 8 hours and sometimes for 12 hours, so that the public would gain very little; unless there were exclusive wires for the purpose, they would not be better served than they are now.

2151. Was not this the proposal, that the telegraph company should rent a certain number of wires erected upon the standards of the railway company?—That was, I believe, the proposal. As far as I understand, it has been objected to in India on account of the terms not being sufficiently fair; that is the objection raised by the railway authorities, but the Governor General does not seem to object to it except simply on that ground, but that there should not be a divided authority upon the line.

2152. Do you think that it would be for the advantage of the community in India, and also for the advantage of persons here who send mes-

sages to India which have to pass over the Indian system, that they should be forwarded by an independent company exercising a general control through India over telegraph communications by means of railways, or that the telegraph service should be left as it is now, in the hands of the Government?—I think of course it would be done better by a private company; if you are speaking as regards the railways, the railway companies would have, as I say, to erect special wires for that purpose, and I do not know whether Government would allow guaranteed capital to be used for cutting their own throats. They must erect wires also to go into the large towns; the railway telegraph is over at Howrah, and not in Calcutta. At Benares again, it is a long way off; at Patna you require to go into the town, and there are some very large towns which are very far from the railway. There is the town of Ghazeeapore, in which there is an enormous business done; it supplies the whole of the northern parts of India, and there the railway telegraph station is, I think, eleven miles away from the town, so that as far as the railway is concerned they would have to have separate superintendence, and to find separate capital. Then with regard to the Government lines, they would have to do the same, and the whole question must be viewed in a very comprehensive light; I have gone very carefully into the whole matter with persons in this country, and it is imperative that there should be a commercial system erected throughout India. Really at present, without saying anything with reference to Government lines, whether they are good or bad, the Indian public have no telegraph at all—it really comes to that; the Government telegraph is for their own purposes, and whenever there are Government messages to be sent, the public messages are stopped just the same way as the railway companies stop public messages also; so that really the commercial and mercantile public of India have no telegraph entirely at their disposal.

2153. One disadvantage of the system of separate railway authority when the railways are completed will be, will it not, that the responsibility will become divided according to the extent of the jurisdiction of each railway company?—Certainly so; and you would get no satisfaction as regards messages; they would just shelve it off on the other division. In fact, it is very much the same in India, as regards the Government line; if you make a complaint in Calcutta, the Government Director General will shelve it off on the Bombay side; he will say it occurred in the Bombay division. I have known this done, although there is a general complaint office established in Calcutta.

2154. Would the Committee be justified in assuming it to be your opinion, you having had considerable experience of telegraphy in India, that any Government system of telegraphy would not be so well suited to the public requirements as that of a public company?—I think not, for this reason, that the Government do not cultivate the traffic; they do not put themselves out of the way to meet the requirements of the public. Take most of the principal stations; take Mirzapore, or Benares, or Allahabad, or most of the large telegraph stations; the telegraph office is in the vicinity of the Civil Commissioner's or the principal military officer's bungalow, which is away from the town entirely;

so that the public requirements, as far as that goes, are not consulted, and, as they admit, they do not put themselves out of the way at all. I know, on one occasion, I was going to send a message from Raneegunge, and the signaller said, "We do not care about private messages;" in fact he was rather indignant at the idea of having to send a private message. He said, "We only care about Government messages, and sometimes we have private messages delayed for days at our office." I must say, when he knew who I was, he sent off my message directly.

2155. The first consideration of a Government establishment would probably be the interest of the Government?—They really do consider their own interests; of course they are bound to do so, having the telegraph in their own hands.

2156. The convenience of the public would necessarily be a secondary consideration?—Naturally so.

2157. The question of profit or loss would be no consideration at all?—It is no consideration at all to the Government.

2158. In the case of a public company the first consideration would be the convenience of the public, would it not?—That would be absolutely necessary, because their own profits would depend upon it.

2159. Mr. *Stansfeld*] What do you pay your native signallers?—We pay them differently, according to the station at which they are employed; just as I was leaving India the lowest figure was 35 rupees a month. At the higher stations, that is to say the through signalling stations, there are generally Eurasians in charge, and they get from 150 to 200 rupees a month.

2160. You stated, did you not, that you found the native signallers faithful?—I have no occasion to complain; I do not say that if we had an immense number of commercial messages, and we have rather a large number it is true, whether they might not betray their trust if the temptation were thrown in their way; but still I have found them exceedingly faithful, and have had no occasion to find fault with them.

2161. We have heard that by the Government telegraphic communication messages would reach the bazaar before they reached the person to whom they were sent; do you find that not to be the case on the railway lines?—We have had no through messages; to Bombay, for instance, we do not work through. The great point with regard to which there have been complaints has been the opium messages.

2162. I presume that you do not wish to draw a distinction between the native signallers and the half-caste signallers in that respect?—No, I would not, certainly; I think one class is just as good as the other. The reason we place Eurasians in charge of stations is simply because they are better educated; they can read and write English well, and you can depend more upon them.

2163. We have had other evidence to the effect that they were not to be trusted with commercial messages; my question to you is, whether you would rather trust a native signaller than a Eurasian?—I do not think I would make any difference between them, as far as my experience goes.

2164. Sir *Charles Bright*.] The Government lose very largely every year by their telegraph administration in India, do they not?—To a very great extent; they lose an enormous sum, something like 130,000*l.* a year, I should say; that is,

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if you take into consideration the interest on the capital expended.

2165. Do you ascribe that to their not paying sufficient attention to the public messages, not doing their work well enough?—Entirely to their not doing their work well enough, and not paying sufficient attention to public messages. There is no doubt that there would be twice or three times the number of messages if the work was really properly performed.

2166. You think that a line of telegraph on a railway would be in every respect better than one which runs through a jungle?—Of course it is better with regard to repairs; but there again you must take a very wide view of it, because there are some commercial districts where there are no railways, so that you would require to have branch extensions; for instance, all down the Madras coast there is a large business done, but there is no railway.

2167. What time do you think a message ought to average between Bombay and Calcutta if wires were established especially for commercial business?—I should think from two to three hours; that is making due allowance for press of messages, and having to work off arrears, or anything of that kind. I should say from two to three hours ought to be the maximum.

2168. You could work direct, could you not, from Bombay to Calcutta?—I see no reason why you should not. We have worked to Monghyr, that is 300 miles distance, with only two copper cells, and I have known Government to be unable to work 120 miles with 80 cells.

2169. Sir *Henry Rawlinson*.] When you say that the Government experiences such a heavy loss on the telegraph establishment in India, you do not take into account, do you, the value of their messages?—Yes, I take everything into account, giving them credit for the value of their own messages. According to their own last published statement for 1863–64, the total amount of deficit, if you take interest upon capital into account, would amount to 129,777*l.*, but the Government do not take in the interest upon capital.

2170. Mr. *Moffatt*.] Do they state what the capital sunk in the Government line of telegraph has been?—I have worked it all out. It is not very clear in the returns. According to the returns, the capital sunk in India up to 1863–64 was 559,013*l.*, and in England 585,021*l.*, making a total of 1,144,034*l.* I may say that the actual expenditure is a good deal more, if you take the losses on the working expenses.

2171. Sir *Henry Rawlinson*.] Having those documents before you, are you of opinion that in private hands the whole system could be made remunerative?—Most decidedly. I am of opinion that it ought to pay remarkably well. If it were properly managed, I should say that from 10 to 15 per cent. ought to be the annual dividend.

2172. Mr. *Moffatt*.] Can you inform the Committee how this loss of 129,000*l.* and odd accrued in the year as to which you have given evidence?—The maintenance and working charges for that year were 136,556*l.*, supplementary 10,746*l.*, total 147,302*l.*, and the revenue was 94,202*l.*, showing a loss of 53,099*l.* Then there is the interest on capital, which is not taken into account, 76,678*l.*, and these two last items make up 129,777*l.*; the interest that I have mentioned is the interest on capital in 1864; but at the present time it amounts to upwards of 100,000*l.*

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2173. *Chairman*.]

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2173. *Chairman.*] Returns have been put in up to a comparatively late period, have they not; have you seen those returns?—I have seen the very latest published by authority of Parliament.

2174. *Mr. Moffatt.*] Those returns show, do they not, that there has been a loss exceeding 100,000*l.* to the Indian Government under the administration of their telegraphic system throughout India?—Yes, they do, if you take into credit, which anyone would do, the interest upon capital.

2175. In their statement of accounts do they credit themselves for the work done on account of the Government?—Yes entirely; it is all included.

2176. At the same rate of charge as that which they make to the public?—Precisely the same, so I understand.

2177. What proportion would the Government messages bear to the public messages?—I do not know what it has been recently, but I think that in 1862 the Government messages were about 15 per cent. of the public messages.

2178. Is there any material difference between the pay of the signallers employed on the railway telegraph line, and those employed on the Government telegraphs in India?—As a rule we pay them less; we have several classes of signallers on the East Indian Railway; we are obliged to have large main stations and we have an immense number of intermediate stations, and at the intermediate stations we do not require hands who are so forward; but at the main stations, where it is necessary that we should have better hands, we pay them better.

2179. You require throughout that they should have a knowledge of the English language?—Yes; they have to pass an examination before they enter the department, and also are required to have a good character.

2180. What is the average pay for signallers on your railway telegraph lines?—The lowest pay is 35 rupees a month, and it goes up to 200 rupees; and I think that there are some who get 250 rupees a month.

2181. You have been asked with regard to the

fidelity and accuracy of the signallers in transmitting messages, I apprehend that in the general class of messages, which they have to transmit with reference to railway business there is no inducement to be otherwise than accurate or secret?—They must be accurate, because there would be accidents if they were not.

2182. There would be no gain or any inducement to their being inaccurate?—None whatever, unless they do so in commercial messages.

2183. What proportion of commercial messages do you take along your telegraph line?—I think about 15 per cent.

2184. For that do you make the same charge as the Government Telegraph Department make?—Precisely the same rates.

2185. Are there in any case competing lines as between the railway telegraph and the Government telegraph?—We compete to several places, to Mirzapore for instance, but still we compete under great disadvantages.

2186. What are those disadvantages?—With regard to Calcutta, our telegraph office is at Howrah, which is on the other side of the river, and which often takes half an hour to cross; we have no office in Calcutta.

2187. Do you find generally that persons desirous of communicating by telegraph give the preference to the railway telegraph or the Government telegraph?—To the railway, naturally; because they are pretty certain to get their messages sent in reasonable time.

2188. Which you mean to say they are by no means certain of by the Government telegraph?—No, not at all. I might say that one time, in order to test the speed of the Government lines, I sent 12 messages, which were the very shortest possible, consisting of only three words; ten of those messages took 24 hours, and one of them took eight hours, and another 13, to go a distance of 500 miles.

2189. Have you known any similar instances of delay on your railway telegraph?—Certainly not as long as that.

Tuesday, 8th May 1866.

PRESENT:

Mr. Ayrton.
Mr. Baillie.
Sir Charles Bright.
Mr. Brooks.
Mr. Childers.
Mr. Crawford.

Mr. Laird.
Mr. Marsh.
Mr. Moffatt.
Admiral Seymour.
Mr. Stansfeld.

ROBERT WYGRAM CRAWFORD, ESQ., IN THE CHAIR.

Sir MACDONALD STEPHENSON; further Examined.

2190. *Chairman.*] HAVE you prepared any statement, setting out a proposal on the part of the company to which you referred in your former evidence, for the establishment of a line of telegraphic communication between this country and India by way of Egypt?—Yes, I have.

2191. Will you put it in?—Yes. (*The Witness delivered in the same.*)

2192. Have you also prepared a map showing the existing and proposed lines of telegraphic communication between this country and India, Japan, and the Australian colonies?—Yes. (*The Witness delivered in the same.*)

Sir M^d.
Stephenson.
8 May 1866.

CHARLES STRONGE, Esq.; Examined.

2193. Mr. Childers.] ARE you one of the principal officers in the Treasury?—Yes.

2194. And have you charge, under the Secretaries of the Treasury, of all the business relating to telegraphs?—Yes.

2195. Can you tell the Committee in what telegraphs between England and the East Her Majesty's Government have an interest?—The Mediterranean Extension, on which they give a guarantee on a capital of 120,000*l.*; the Malta and Alexandria, which belongs to the Government, and is on lease; and there is a small line between Alexandria and Suez which they have now only an indirect interest in.

2196. The last line is not worth mentioning, is it?—No.

2197. We have the power, have we not, on the payment of 46,000*l.*, to recover it if we think fit?—Yes.

2198. But, coming now to the Malta and Alexandria telegraph line, that you say is the property of the Government?—That is the property of the Government. Perhaps I may be allowed to state that the Malta and Alexandria telegraph cable was originally designed to be laid between Falmouth and Gibraltar, its destination was subsequently altered to between Rangoon and Singapore, and was then changed between Malta and Alexandria. It was successfully laid in sections, viz., between Malta and Tripoli, Tripoli and Bengazi, and Bengazi and Alexandria, towards the end of the year 1861. The total expense of the cable-laying, &c., &c., amounted to 436,283*l.* 10*s.* 8*d.*, three-fifths of which were defrayed by the Imperial Government, and two-fifths by the Indian Government. Application having been made by Messrs. Glass,

Elliot & Co., the contractors who had laid the line, for a lease of the line, after some negotiation, a lease was granted to them for five years. (I presume that I need not enter into the terms of the lease.) In the year 1864, the business of Messrs. Glass, Elliot & Co., having been transferred to the Telegraph Construction and Maintenance Company, application was made to the Treasury for permission for that firm to transfer also to the company the lease of the Malta and Alexandria telegraph, to which, after inquiries had been made as to the respectability of the company, the Treasury assented. In the early part of last year, the line having repeatedly become interrupted, owing to the unsuitableness of the deep-sea portion of the cable, to the rocky coast upon which a large amount of it has been laid (particularly between Bengazi and Alexandria), Mr. Pender, the chairman of the Telegraph Construction and Maintenance Company, entered into negotiations with Mr. Peel, the late Financial Secretary to the Treasury, for a new lease of the line, which new lease has not yet been carried out; there are various arrangements yet to be made.

2199. The company have, however, agreed to take a lease at 3½ per cent. upon the capital?—Yes; at 3½ per cent. upon 436,000*l.*

2200. And that lease will be completed in due course?—Yes.

2201. How long is the lease for?—Forty-two years.

2202. Are there any conditions of resumption in the meanwhile?—The company will be able to give it up at the end of 10 years on giving notice.

C. Stronge,
Esq.

C. Stronge,
Esq.

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2203. Going now to the line between Malta and Sicily, what interest have the Government in that?—With regard to the Mediterranean Extension Telegraph Company, this company having obtained the sanction of Her Majesty's Government for laying telegraph lines between Cagliari and Malta, and Malta and Corfu, cables were submerged at the end of the year 1857; and Her Majesty's Government granted a conditional guarantee upon the lines being kept in working order for a period of 25 years, on a capital of 120,000 *l*. The cable between Cagliari and Malta having been twice broken, and large sums of money expended in attempting to repair it, it was finally abandoned in the autumn of 1859. Application was then made to the Treasury by the company to be allowed to lay a cable to connect Sicily with Malta, in lieu of the Malta and Cagliari line abandoned, and a concession was obtained from the Neapolitan Government for the purpose; such concession being submitted to the Treasury, objection was taken to the 14th Article therein, whereby the exclusive privilege of landing cables in Sicily from Malta was granted to the company for a term of 30 years from the date of the convention. The company agreed to renounce such Article, and Her Majesty's Government thereupon agreed to transfer the guarantee of the Malta and Cagliari line to the new route.

2204. So that at the present time the Government have guaranteed 6 per cent. upon a capital of 120,000 *l*, which is supposed to be expended upon the line between Malta and Sicily?—There are two lines which the company have; there is the line between Corfu and Italy, which was accepted in lieu of the line between Corfu and Malta, on which an interruption occurred in 1859, which it was found impossible to repair.

2205. Then does the guarantee extend to the two lines?—It extends to the two lines virtually.

2206. That is to say, the line between Malta and Sicily, and the line between Corfu and Italy?—Yes; between Corfu and Otranto.

2207. So that we are responsible to the extent of 7,200 *l*. a year, practically, for the communication between Malta and Sicily?—Practically we are, because that is the line which earns the money now.

2208. So that any line between Egypt and England, which missed the line between Malta and Sicily, might put the Government to the expense of 7,200 *l*. a year?—Precisely so.

2209. How long is that guarantee for?—For 25 years from the end of 1857.

2210. That is the whole interest, is it not, which at the present time the Government has between Egypt and England?—That is the whole interest.

2211. *Chairman.*] Has any proposition ever been made to the Treasury, on the part of the company, which has leased the Malta and Alexandria line to take over the line between Malta and Sicily?—Mr. Glass has spoken to me on the subject, but I do not think that the proposition has ever come in an official shape.

2212. Would it be objected to, on the part of the Treasury, to transfer that lease with its guarantee to the Malta and Alexandria lessees, if they could make terms with the present owners?—If the public were relieved from the guarantee, and they could make satisfactory terms with the owners of the present line, I can see no objection to it at all.

2213. Would not that sanction include the re-

linquishment of the guarantee?—The guarantee is on behalf of the Mediterranean Extension Telegraph Company, and we should have to look very carefully into the bearings of such a matter as that, when it was brought before us. Certainly the Mediterranean Extension Company, I think, require some little support; they have had very bad times, and they have done their work, as far as we are concerned, very well.

2214. What I meant was this, that as the Government have accepted the present lessees of their line from Malta to Alexandria, would there be any hesitation on the part of the Government to allow of the transfer of the line between Malta and Sicily, now belonging to the Mediterranean Extension Company, to the Malta and Alexandria lessees, if the two made terms together?—I could see no objection to it. The only thing would be the protection of the Government. If they took the guarantee off our hands, and the Mediterranean Extension Telegraph Company would agree to part with the Government Guarantee, I can see no objection to it.

2215. What I mean is this: the Treasury having accepted, we may call them Glass, Elliot & Co., as lessees at 15,260 *l*. a year for 42 years to come, would there be any objection to their taking the Mediterranean Extension Guarantee, amounting to 7,200 *l*. in addition?—That would be a question for the Secretary to the Treasury to decide rather than for me; of course one would have to look at it in all its bearings, to see how it affected the Government.

2216. *Mr. Childers.*] It would depend, would it not, upon its being clearly shown that the accounts of the Malta and Sicily line were so clear as to enable the guarantee to operate?—Of course it would.

2217. The guarantee is upon the net profits of that section of the line, is it not?—Yes; the only thing is this, that since 1862 we have not been called upon to pay anything to the Mediterranean Extension Telegraph Company, so that at present we are, you may say, in clover.

2218. *Chairman.*] Instead of paying money, have you been receiving anything?—No, we have received nothing at all; the company have not paid any very high dividend. We have paid nothing since 1862 upon the Mediterranean Extension Guarantee. Directly the line between Malta and Alexandria was opened, of course there was a flow of traffic into the Mediterranean Extension Company, which has enabled them to pay their dividend without coming upon us on account of our guarantee.

2219. In fact, at present, neither of those two lines is a charge upon the Imperial Exchequer?—Neither, I think, is any charge upon the exchequer; on the contrary, we are to get a rent from the Telegraph Construction and Maintenance Company for the Malta and Alexandria line, and the Mediterranean Company pays its way.

2220. Has the rent from the Malta and Alexandria Company been regularly paid?—It has not been so regularly paid as it might have been; it is to be regularly paid when we get the new lease all settled. But there is a sort of cross claim against us on account of repairs now, which has prevented, up to the present time, the settlement of the accounts to 13th of May 1865, the date from which the new lease is to take effect.

2221. Do they render you any account of their receipts?—Yes, we have an officer at Malta who sees after that for us. We have the accounts every

every quarter examined into, settled and balanced; and that amount would show the gross receipt. I can give you the amount of the gross receipt now if the Committee would wish it. The gross receipts for messages, after deducting 10 per cent. for the reserve fund, for repairs, from November 1861, when the line was first opened, up to the 13th of May 1865, when the new lease will take effect from, amounted to 141,903 *l*. The proportion of the receipts due to Her Majesty's Government, as lessors of the line, amounted to 68,718 *l*. odd.

2222. What were the working expenses?—We have nothing to say as to the working expenses. The lessees work the line out of their share of profits. The proportion of the receipts payable to the Imperial Exchequer out of that amounted to 41,231 *l*.; the remaining two-fifths were paid to the Indian Exchequer, they having paid two-fifths of the original expense of the line.

2223. How much is the Indian share in figures?—The difference between the 68,718 *l*. and 41,231 *l*.

2224. And do the lessees get the balance?—Yes; I could give the proportions of how it was settled up to the 13th of May, and how the receipts were assigned, if the Committee would wish to hear them. The lease is in existence up to the end of this year; but the new lease is to take effect from the 13th of May last year, and by the terms of that lease 10 per cent. of the gross receipts were to be paid to a reserve fund, and after that, from all receipts up to 25,000 *l*. a year, the lessees were to receive two-thirds, and the Government one-third; from 25,000 *l*. up to 55,000 *l*. the Government were to receive two-thirds, and the lessees one-third; and after that, on all receipts the Government were to receive three-fourths, and the lessees one-fourth. Those were the terms of the old lease, the payments to the Government being divided between the Imperial and the Indian Governments; three-fifths to the Imperial Government, and two-fifths to the Indian Government.

2225. Sir Charles Bright.] Is the reserve fund 10 per cent. upon the gross receipts?—Yes, the reserved fund is 10 per cent. upon the gross receipts. The reserved fund, as you may say, now is virtually exhausted, because there is a large amount due on account of repairs; and I think that will take very nearly the whole of it, if not the whole of it; in fact, it was a reserved fund intended for repairs; but the line, owing to the light cable that was laid between Benghazi and Alexandria, has failed so often that the repairs have been very expensive.

2226. What is the present state of the line?—It is working very well, I believe, now; it is in good order, but we can never trust that light cable. It was a light cable which was originally designed to be laid between Falmouth and Gibraltar, for a very deep sea-line; but it was laid upon a rocky coast, and is constantly being broken.

2227. Mr. Childers.] Have you no official means of knowing the expenditure of the reserve fund?—The lessees have at different times sent us in accounts for repairs. One set of repairs were settled and paid for some time ago out of the reserve fund, after an arbitration, which cost a good deal of money; and now there is an account for some repairs before us, which has not been settled in consequence of one of the trustees of

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the reserve fund, on behalf of the lessees of the line, not having returned us the power of attorney for the sale of reserve fund stock, which was sent to him to be signed.

2228. But, under the present lease, the Government have nothing to do with repairs?—No, under the new lease they have nothing to do with repairs; they are in the position of landlords, receiving a rental.

2229. Sir Charles Bright.] Then it was not a reserve fund properly so called?—That is what it is denominated in the lease.

2230. Was it employed from year to year for repairs?—No, not altogether so. It was allowed to go on accumulating, and when the repairs took place, then the company made the claim; because they would not have been paid out of the reserved fund if an accident to the line had occurred through any laches on their part; but after it was certified that the damage had not occurred through any mismanagement of the company, then their claim was good against the reserved fund.

2231. Do you consider the cable, at the present time, worth the amount that was paid for it?—I think that an engineer would give a better opinion upon that than I can. It cost a great deal of money, 436,000 *l*.; but it has cost, in fact, a great deal more than it should, because its destination was several times altered, and that made it cost a great deal more than it otherwise would have cost. Now, I believe, they can make the cables cheaper, at least I am told so; I am not an engineer, so that I can give no decided opinion upon that point.

2232. But your reserve has not apparently been sufficient to keep the cable up to its original value?—No, I should think hardly. Up to this moment the claims which are against it I think will exhaust it, and those claims are not quite settled; but after the 13th of May we shall have nothing to do with a reserve fund at all.

2233. Have you had any valuation of the cable made by any competent persons at any time?—I think it is hardly possible to value it, because it is at the bottom of the sea; and we know that it is very deteriorated between Benghazi and Alexandria.

2234. Mr. Marsh.] Do they fish it up when it is broken?—Yes; and they cut the weak piece out, and put a fresh piece in. Several times they have taken it up, and cut out the weak cable, and put in a heavier cable wherever the ground is very rocky.

2235. Sir Charles Bright.] Cannot you discover its condition at such periods?—It is an expensive work to take it up; besides, it is very brittle in the parts where they have lifted it, and it snaps.

2236. During such repairs, do not you get some insight into the condition of the cable?—Yes; we get a report when it is repaired. But you must consider it is 1,300 miles long, and between Benghazi and Alexandria, where the worst part of it is, it is between 500 and 600 miles long.

2237. However, you have not made any valuation of the cable since it became your property?—No; we can only value it by its receipts; and during the American war the receipts were larger than they are now.

2238. Have you ever had any communication with the Austrian Government about the line from Ragusa to Malta?—That was before I had any charge of the department, which I have now. There was a considerable correspondence; and you

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you will find papers laid before Parliament giving the details of the correspondence between the Austrian Government and our own Government; but I am not cognisant of the matter at all.

2239. Have you had no communication lately at all from the Austrian Government?—I have not seen anything lately.

2240. Mr. Ayrton.] Have you laid before Parliament the last contract entered into about Malta?—We have not got the lease yet; it is not finished.

2241. Is it not settled?—It is in course of settlement by the solicitor of the Treasury and the solicitors to the company, upon terms which were virtually agreed upon between Mr. Peel and Mr. Pender.

2242. Has that contract been made subject to the approbation of Parliament?—I suppose there would be no objection to lay it before Parliament; but it is not a contract at all, it is a lease.

2243. Is it not in the nature of a contract?—It is a lease, like letting a house; it is a lease of the line to a company upon their paying a certain rent for it. We do not pay them, they pay us.

2244. You have no objections, you say, to lay it before Parliament?—There is not the slightest objection, when the lease is made, to laying it before Parliament.

2245. Is the Malta and Egypt line no longer a part of the communication with India?—I suppose they send messages by it still for the packet. I do not know anything about the Persian Gulf; but I fancy that the Persian Gulf line is very expensive, and that the messages do not always come through correct. I know no particulars about it.

2246. Have you ever paid any money, under the contract, for telegraphic communication between Malta, Sicily, and Otranto?—Yes, we paid up to the end of the year 1862. The following statement will show all that we have paid under our agreement with the Mediterranean Extension Telegraph Company.

The Amounts paid by the English Government under the Guarantee, during each Half-year, are as follows:—

	£	s.	d.
Paid on or about 30 Oct. 1859:—To 30 June 1859	5,828	19	10
" " " 7 Feb. 1860 " 31 Dec. 1859	976	8	9
" " " 30 Aug. 1860 " 30 June 1860	1,800	—	—
" " " 21 Feb. 1861 " 31 Dec. 1860	1,800	—	—
" " " 26 Aug. 1861 " 30 June 1861	3,101	18	4
" " " 21 Feb. 1862 " 31 Dec. 1861	3,023	15	4
" " " 11 Aug. 1862 " 30 June 1862	1,791	4	—
" " " 16 Feb. 1863 " 31 Dec. 1862	286	2	6
Total Amount Received under the Guarantee - £.	18,608	8	9

2247. Was it not in 1862 that the line broke down?—No; the line broke down, I think, in 1859.

2248. You mean that the line has been self-sustaining since then, and that you have not been called upon to pay the guarantee?—Yes, it has been perfectly self-sustaining; we have paid nothing since the 31st December 1862.

2249. Do you know whether those substituted contracts were laid before Parliament?—That is mentioned in the correspondence; I have the correspondence here, and I see marks upon it which show that it must have been printed for Parliament.

2250. You have nothing to pay now, in the communication with India, by way of subsidy, excepting in the charge for the Indian line; the Treasury pay nothing for it?—No; the Treasury pay nothing. I know nothing about the Indian line; that does not come into the Treasury at all.

2251. What did the Treasury pay this subsidy for; for the communication with Malta?—I suppose it was a part of the scheme to India; and of course it was to Malta too, it being a fortress under the Government. Mr. Wilson was the person who originally carried it out. I find a letter of his, in which the arrangement for making that line, and for the payment, was laid down, and that has been before Parliament.

ROBERT KNIGHT, Esq., further Examined.

R. Knight,
Esq.

2252. Chairman.] Do you wish to offer any further evidence to the Committee, with respect to the performance of the Peninsular and Oriental Company of their Indian contract?—Yes.

2253. On what point do you wish to offer evidence?—Upon the speed of the company, and the effects of the monopoly which they possess.

2254. Do you complain of the speed maintained upon the Indian lines?—Upon the Bombay line especially.

2255. What do you conceive the present rate of speed to be?—In the last returns, the speed for 1863, upon the Bombay and Suez line, is given at 9½ knots, and for 1864 at nine knots; and I myself tried the outward voyages of 1865; and, as far as I could make out, it was about 8½ knots for the year; so that there has been a steady deterioration of late years.

2256. What do you think the speed ought to be?—Eleven or 11½ knots an hour.

2257. Are you aware of any mail steamers which perform the service at that rate?—The Cunard steamers are doing better than that, and have been for years.

2258. Are you quite sure upon that point?—Mr. Howell, the other day, told the Committee that the average speed of the Cunard lines, ac-

cording to the latest returns before Parliament (the returns of 1862), was about the same speed as that of the Peninsular and Oriental Company to-day. I have in my hand the latest return dated the 20th of May 1862, in which the speed of the Cunard line is given for 1861; and I have taken out the average speed upon the New York line, homewards and outwards; and I find that the outward mails were carried, on the average, in 12 days and 11½ hours in the year 1861.

2259. Mr. Laird.] Was that from Queens-town?—No, from Liverpool; and there was a detention of six hours, on the average, at Queens-town; so that they were 12 days and 5 hours under steam.

2260. Chairman.] What speed per hour do you conceive that to be?—10·58 knots. The homeward mails of 1861 averaged 11 days 6 hours, which is an average speed of 11·48 knots. These are the averages taken from the last return.

2261. What distance do you assume that as being?—3,100 miles, from "Rainey's Ocean Post," which I have in my hand. I also took out the average speed of the "Persia" for the year 1861, upon the same line, and I find that she was exactly 10 days on the average outwards, and 10 days and 15 hours homewards, giving a speed respectively

spectively of 13 knots and 12½ knots. That was the Cunard speed in 1861. If Mr. Howell were right in what he told the Committee the other day, that the Cunard steamers were running at about the same rate as the Peninsular and Oriental vessels, at all events on the Bombay line, you would be 16½ days getting your mails from New York. The present average is 10½ days from New York, which gives a speed of between 12 and 13 knots. I beg leave to hand in these returns. (*The Witness delivered in the same.*)

2262. *Chairman.*] Do you think that the speed of the Indian mail steamers ought to be the same as that of the North American steamers, whatever that speed may be?—Most certainly.

2263. Do you think that the circumstances of the cases are analogous, so as to justify you in making that statement?—I am satisfied that the Indian line is a far more favourable one for steam power than the Atlantic line. On the Atlantic line there are constant detentions from fogs, from icebergs, and from storms; we have nothing of the kind on the Indian line; and though it may be the case, that there is some little loss of power in the Indian seas from the higher rate of temperature of the water, and the difficulty of condensing, the Committee must know that that can only be a very trifling consideration; if you put it down at half a knot an hour, I imagine it would be the full extent of it, or more. But the argument is worth nothing, because the speed of the Peninsular and Oriental Company's vessels on this side of Suez, is almost the same as on the other side.

2264. Is your allegation that the Peninsular and Oriental Company employ an inferior class of vessels, or that they do not propel the vessels that they have at the rate at which they could propel them?—I am disposed to think that it is not the inferior class of ship that is employed, but the expenditure of fuel which prevents their doing it. They will not expend the fuel to get a high rate of speed, while the Post Office allow them to be either within or without their contract, as they now do.

2265. You argue that it is a question wholly of expense, in connection with fuel?—Yes, wholly of expense; we ought to get a better speed on the Indian line than upon the Atlantic.

2266. Practically, it comes to a question of an increase in the subsidy paid?—I will speak upon that presently if you will allow me. I am not satisfied that we require a subsidy at all, for the carriage of the Indian mails; at all events at the present rate of speed.

2267. Are you aware that it was given in evidence the other day that vessels which have attained a certain speed in the Mediterranean lose half a knot when they are transferred to the other side of the Isthmus?—I heard that, and I say that possibly it may be true. From the increased difficulty of condensation, there may be a loss of half a knot, but here is a difference of knots: the speed of last year, on the Bombay line, was 8½ knots, compared with 12½ knots on the Atlantic service.

2268. Where do you get the distances from upon which you base your computation of the time taken in the transit of the North American steamers?—"The Ocean Steam Navigation, by Thomas Rainey;" it is there given as 3,100 miles.

2269. I asked the question because I am under the impression myself that the Post Office distance

is 3,012 miles?—That would make only a small difference, about $\frac{1}{100}$ th of the whole.

2270. Supposing the rate at which you state the North American steamers are propelled was attained on the Bombay line, in how many days would the mail then be carried?—In from 20 to 21 days; say 20½ days.

2271. What is the time at present occupied?—Twenty-four and a half days; there would be a saving of four days.

2272. What do you compute to be the exact distance by sea and railway from Dover to Bombay by way of Marseilles?—There are 1,085 miles of railway exactly from London to Bombay, and 4,461 knots at sea.

2273. Have you got the constituent parts of those 4,461 knots?—Yes; from Dover to Calais 22 miles; from Marseilles to Malta 650; from Malta to Alexandria 815; from Suez to Aden 1,308, and from Aden to Bombay 1,664; I have taken those figures from the Peninsular and Oriental Company's published prospectus.

2274. What time do you allow for detentions in your estimate of the time?—Sixty-six hours; nearly three full days.

2275. At what places?—I will give the particulars. I allow a stoppage at Dover of four hours; a needlessly large stoppage, I imagine; at Calais four hours; at Paris four hours; at Marseilles four hours; at Malta eight hours for coal; at Alexandria five hours.

2276. But is it not a matter of one's own personal experience that the mails are taken alongside the steamer on Dover Pier?—I am giving these large detentions that I may not be considered extravagant in estimating the period within which the mails should be carried.

2277. Practically, there is no detention at all, is there?—It is very little; I had put down two hours in my paper, but am ready to allow four.

2278. We know that the mail leaves London on the evening of one day, and on the morning of the following day but one, at eight o'clock, it leaves Marseilles?—No doubt that is so; I have allowed for a detention at Aden of 10 to 15 hours; but there ought to be no stoppage at Aden at all; it is a mere question of fuel; again, they do not want to coal at Suez because of the expense.

2279. What is the shortest time in which you have ever known the mails to be carried to Bombay?—Nineteen days and six hours.

2280. Under what circumstances was that exceptional passage made?—We have frequently had the mail in 20 days and a few hours: the instance I refer to was during the monsoon, probably, under circumstances which I do not know, when the company must have chosen to expend more fuel; I can only account for it so. We have frequently had it in 20 days and a few hours.

2281. Are you aware of what the contract rate of speed is?—It is 10 knots.

2282. As a matter of fact, within your experience, have the Bombay mails generally been carried within the contract time?—Certainly not. The Parliamentary Return shows they have not; they have been constantly below it.

2283. Has the company laid itself open to penalties?—In all their contracts there is this noticeable fact, that there is no provision whatever for penalties.

2284. *Mr. Childers.*] Is that the case under the present contract?—That I will come to presently.

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sently. There is no provision for penalties in the old contracts; the company has been allowed to go at any speed they pleased, so long as they maintained what the Post Office thought a decent speed.

2285. *Chairman.*] Are you not aware that it appears upon the face of the documents which have been handed in to the Committee, that an annual adjustment has been made, between the Post Office and the Peninsular and Oriental Company, under which penalties are inflicted, and premiums awarded, the result of which has been in favour of the Peninsular and Oriental Company?—I think that evidence has exclusive reference to something which has taken place within the last two months, when, as I suppose, the company and the Post Office foresaw that this inquiry was coming on. The Return of the 10th of May 1865 professes to include the excess of penalties over premiums; and I find that there are no penalties whatever.

2286. When you use the word "profess," do you dispute the accuracy of the Return?—I suppose I should say that it gives it; it gives the rates of charges, and the deductions for penalties, and the premiums awarded, for 1863 and 1864; there is a foot note, "Excess of penalties over premiums," and the text shows that no penalties have ever been inflicted upon the Peninsular and Oriental Company; I doubt whether there has ever been a remonstrance.

2287. Are you aware that, under the present contract which has been entered into between the Government and the Peninsular and Oriental Company, the question of time has been otherwise regulated, and that the company is not bound to perform its voyages at a certain rate per hour, but to perform the voyage within a certain time?—Yes, I am aware of it, but it is a very recent regulation.

2288. And there is a penalty of 50*l.* inflicted upon the company for every day beyond time, and a premium of 25*l.* awarded to the company for every day that the steamer is within the time?—The penalty is ridiculous. When you remember that it is a question of fuel, 50*l.* a day is of no importance whatever.

2289. But the papers before the Committee show, and the evidence given shows that the company has not been behind its time?—The Bombay line is the one that I am specially referring to; the most important of all the lines; there is no line which will compare with it for a moment; and on that line the Returns show a speed constantly below the contract rate.

2290. Do you confine your observations just now to the Bombay line?—Specially to the Bombay line.

2291. Do you state, that upon that line the Peninsular and Oriental Company have been habitually behind their time?—Yes, habitually; they have carried at a rate at which we could have got the mails carried for the ocean postage, without any subsidy at all; we might have had steamers running between Bombay and Suez, receiving simply the ocean postage, and we should have got the mails carried as quickly.

2292. Do you maintain that the present speed shows no improvement upon the speed of ten years ago?—I have not the data to refer to, but I affirm from memory that the time in which the mails have been carried for years past shows a deterioration; they are not carried as quickly as they were ten years ago.

2293. Are you aware that a question of speed

is practically a question of expense, and the question of expense depends, in a great degree, upon the consumption and the cost of fuel in the Eastern seas?—I believe it is entirely a question of the cost of fuel with such vessels as the company possess.

2294. Are you acquainted with the cost of coal in the Eastern seas?—I have a strong impression that Mr. Howell's statement that the average cost of coal in Bombay for the last five years has been 29 rupees a ton is incorrect; I am reasonably sure that the average cost of coal in Bombay has not been more than 20 rupees to 22 rupees a ton during the last five years; I mean the sale price of it.

2295. Have you any documentary evidence to prove that?—No, I have not; I am stating my impression.

2296. Are you speaking of the price of coal as delivered by the seller to the buyer?—Yes.

2297. Does that include the charges of handling, management, storage, or the loss in weight by exposure to the air?—Yes; all that is included in the selling price, I state my belief that the selling price of coal in Bombay has not exceeded 20 rupees to 22 rupees a ton upon the average of the last five years.

2298. Do you mean delivered at that price?—I mean as quoted in the price currents.

2299. Do you think that that would have been a fair price for a company, using such an enormous amount of coal as the Peninsular and Oriental Company do, to have relied upon?—I should have supposed that the Peninsular and Oriental Company would have been able to supply themselves upon much better terms. In their report ending the 31st of March, 1860, the Directors told the shareholders that the average cost of coal at all their stations was 51*s.* 7*d.*; in a subsequent report I think it was stated to be 46*s.* Now Bombay certainly cannot be one of their most expensive stations; I should think it would be one of the cheapest, because vessels going there obtain freight only on the homeward voyage.

2300. Supposing, for the sake of argument, that 22 rupees a ton is a fair average market price for coal in Bombay, may it not be the fact that that comparative cheapness of price is due to the circumstance that the Peninsular and Oriental Company do not look to the Bombay market for their supplies; but they guard themselves against the contingency of high prices there by making contracts in this country for the delivery of coal to them in Bombay and Aden, and elsewhere?—Yes; but a company which can keep 360 vessels at once afloat at sea with coal, is likely, I think, to make the very best of the price of coal that can be made, and to lay in their stores at the very lowest rate possible.

2301. Do you dispute the fact of the figures being correct that Mr. Howell gave in the other day as representing the sum which the coal cost the company for consumption?—We are satisfied in India that the accounts of the Peninsular and Oriental Company are so made up, so that their dividends do not show fairly what their profits really are.

2302. Will you have the goodness to answer my question?—We are perfectly persuaded that from the coal-stores of the company large deductions on the ground of deterioration are made year by year to lessen their profits; and large additions made to the cost, in making up the accounts for the Post Office or for this Committee,

to show how costly their service is. Large deductions are made in their books by which the apparent value of the stores by no means corresponds with the stores in their godowns. We do not trust the company's statements.

2303. When you say that you are persuaded that that is the fact; I presume you mean no more than to give the Committee to believe that that is your idea; you have no evidence of the fact to give the Committee?—It is a very strong idea, and it rests upon a very close inspection of their published accounts for many years.

2304. But the secretary to the company has stated here the method by which they obtain their supplies of coal, and he stated that it was done by advertisements, or by applications made to shipowners, and that they have the benefit of competition, and he has given us the prices at which their contracts are deliverable at Suez, and at Aden, and at Bombay; do not you give the Peninsular and Oriental Company credit for getting coals on the cheapest terms they can?—You will observe that there was 25 per cent. added to that cost for some extraordinary accumulation of charges, which I confess I could not understand.

2305. I understand that 25 per cent. to represent the expenses of the management of the coal, the deterioration of the quality and the loss of weight; and the secretary stated in answer to a question which was put to him, that they made no profit upon their coal account; the Committee, I think, would be bound to receive that as a fact, unless you can give us any documentary evidence in opposition to it?—I think you would be bound to receive it as a fact.

2306. However, your opinion generally is, that the cost of the coal has been somewhat exaggerated?—Yes.

2307. Have you any knowledge of your own as to the expenditure of coals in vessels of certain dimensions, with reference to the rate of speed at which they are to be propelled?—None of my own knowledge; but I have here "Rainey's Ocean Post," in which the consumption of coals is given as follows: a vessel of 2,500 tons displacement, at eight miles an hour, will burn 21·1 tons per day, at nine miles she will burn 30 tons, and at ten miles she will burn 41·2 tons.

2308. So that the effect of increasing the rate of speed $1\frac{1}{2}$ knots an hour, would be to double the consumption of coals?—I take it that the consumption of coal at $8\frac{1}{2}$ knots would be about 25 tons per day, at 10 knots about 41 tons. So that it would be virtually an enhancement of the subsidy by a very large amount, if they are allowed to run at the speed of 9 knots, or $8\frac{1}{2}$ knots when the contract rate is 10, and they are paid at the rate of 10 knots. If they are allowed to run at a lower rate, the expenditure of coal is greatly lessened, which is virtually an enhancement of the subsidy; and I think I can show that the lessened speed is equivalent to an enhancement of the subsidy on the Bombay line of 30,000*l.* odd a year.

2309. How do you arrive at that?—I take the number of days voyage, 14 days; and the saving per day, 15 tons of coal. I multiply that by 48, the number of voyages, and take the cost of coal at Mr. Howell's rate, 2*l.* 18*s.* per ton, and I find the amount to be 30,000*l.*

2310. What is the mileage rate, according to your information, of the subsidy paid to the company?—I cannot understand Mr. Howell's evidence upon this point.

The mileage rate is most distinctly, in the contract of July 1854, stated to be on the Bombay line 6*s.* 2*d.* a mile. Mr. Howell stated it to be 2*s.* 7½*d.*

2311. How do you get at the 6*s.* 2*d.*?—By the 31st paragraph of the Bombay contract, of the 7th July 1854, under which they are now running, they are liable to a deduction from the contract service money, at the rate of 6*s.* 2*d.* per nautical mile, under certain circumstances, and working out the mileage distance at that rate, 6*s.* 2*d.*, it gives the amount of the subsidy 24,000*l.* odd.

2312. Have you anything to say upon the subject of the subsidy generally?—I think the subsidy paid upon this line has been nearer 80,000*l.* than 40,000*l.*, for the reasons I have stated. The total amount of the subsidy given to this company is enormous; it is upwards of 400,000*l.* When I was here before, I was under the impression that it was 200,000*l.*; but I see by the returns, that it is 402,000*l.*, which is 20 per cent. per annum upon their paid-up capital.

2313. I presume that the amount of subsidy has reference to the service performed, and not to the amount of capital employed by the company in performing it?—No doubt; but a company which starts with 20 per cent. subsidy upon its capital per annum is plainly in circumstances to destroy competition, however necessary for the public interest competition may be.

2314. Were you a party at any time to a proposition made to the Post Office for the establishment of a fortnightly service to Bombay?—Yes, I saw Mr. Hill two or three times about it, and I proposed to him that we should be allowed to start a fortnightly mail from Bombay, and to receive as remuneration simply the ocean mail postage. Here is a copy of the letter which I addressed to Mr. Hill on that occasion, and it is in these terms: "Jerusalem Coffee House, 20 March 1865. To Frederick Hill, Esq., Secretary, General Post Office, London. Sir,—Will you kindly inform me whether, in the event of my friends running first-class steamers fortnightly between Suez and Bombay, alternately with the vessels of the Peninsular and Oriental Steam Navigation Company, you will be prepared to entrust them by each opportunity, with the carriage of Her Majesty's mails to and from India; and grant them, as remuneration for such service, the ocean postage you now charge for the transit of letters, &c., between the ports named? Should you be able to answer this inquiry in the affirmative, will you then kindly furnish me with particulars of the weight, number of letters, amount of postage, &c., of the Indian mails, now carried fortnightly by the Peninsular and Oriental Company's vessels from Suez, *viâ* Galle, to Madras and Calcutta, as I am satisfied that the service I seek to establish will attract nearly all the Indian portion of these mails to Bombay, as the most rapid line of transit. I have, &c., (signed) *R. Knight*, chief proprietor, 'Times of India.'"

2315. Did you make that tender on behalf of any company?—Yes, at the request of a company in India, and I was told that the proposition could not be entertained.

2316. Was that a company whose head quarters were in India?—Yes, their head quarters were in India.

2317. Do you think that there would not have been some practical inconvenience in the Post

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Office here, making a new contract with a company abroad for the conveyance of its mails?—I do not think that the Post Office here should enter into any such contract; it is a matter for the Indian Post Office. I do not see why the latter should be kept in leading strings for ever by the General Post Office of this country; we are as capable of managing our Post Office in India as Australia is of managing hers.

2318. You mean for the service between Suez and Bombay?—Yes, Suez and Bombay, but right through to England.

2319. If you claim on behalf of the people of India that you should have practically the control of the Post Office communication, what answer should you give to a similar claim made on the part of the people of England?—We do not claim the control of it; but we claim to treat upon equal terms with your Post Office. As it is now, the General Post Office does as it pleases with us, and with our revenues too. In a letter from the Under Secretary of State for India, dated the 5th of October, 1865, to the Secretary of the General Post Office, the Secretary of State says, that “the decision of the question is entirely in the hands of the Postmaster-General.” I am satisfied that while the Postmaster-General of this country is allowed to administer our postal finances as he pleases, the people of India will be inequitably dealt with; it is in the nature of things that it should be so.

2320. Are you aware that in all that the Postmaster-General does here in connection with the Indian mails, he acts in communication with the Secretary of State for India?—I am quite aware of it.

2321. Therefore, the people of India, or the Government of India, have a direct influence upon the proceedings of the Postmaster-General through the India Office?—But unfortunately it is a money question, and the Secretary of State for India, and the Postmaster-General of this kingdom, are ministers of the same cabinet, and Parliament is accustomed to scrutinize very closely the expenditure every year, and it is plain, from Mr. Hill’s evidence, that the Post Office is determined to make their establishment pay, and so escape criticism.

2322. What is your proposal now; is it that too much or too little is paid for the service?—At the present speed, I am satisfied that too much is paid, for the line is an immensely lucrative one; 10,000,000 *l.* of specie is carried year after year upon it.

2323. You think, that for the same sum of money, a better service could be obtained?—Yes; at this moment there are steamers running without a subsidy, on account of the traffic on the line.

2324. Would they be able to give the guarantee to the public which a company possessed of a large capital and a large number of steamers like the Peninsular and Oriental Company can give?—They could give any amount of guarantee.

2325. I mean such a guarantee as the possession of a reserve of vessels which, as has been stated in evidence, has always enabled the Peninsular and Oriental Company to supply a vessel when they have been so unfortunate as to lose one?—I should think in six months, or nine months, they would do it. They probably might not be able to do it within a month, or a couple of months; but one of those companies, the

British India Steam Navigation Company, has a very fine fleet now.

2326. What is the size of their vessels?—Many of them are 1,200 tons burthen.

2327. Do you think that a 1,200 ton steamer would be calculated to perform the voyage to Suez in a shorter space of time than one of the Peninsular and Oriental Company’s steamers?—No, but they would make the speed attained by the Peninsular and Oriental Company; and the thing is to get the thin end of the wedge of competition in. If we once get that in, we shall soon get an efficient service.

2328. And you think the way to do that would be to have an alternate fortnightly service?—Yes; we shall never get a thoroughly efficient service until it is so; I know the conviction of every man in India who understands the subject, from the Government downwards. I will read the opinions of the Government of India upon the subject if the Committee wish me to do so.

2329. In what form has that opinion been expressed?—In the form of official papers, which have lately been published in India; I imagine that those papers must be before the Committee. If they are not they certainly ought to be.

2330. What date are they?—They arrived by the last mail from India, but I imagine that they are all before the Committee. I refer to the correspondence which has taken place upon the subject of a weekly mail service between England and Bombay.

2331. What is the date of that correspondence?—From July 1865 to February 1866.

2332. Can you state, that in the event of notice being given by the Government to the Peninsular and Oriental Company to terminate their contract, there would be a fair amount of competition from India?—My desire, certainly, would be that the existing service of the Peninsular and Oriental Company to Bombay should *not* be terminated. I say, let it be carried on; but let us have another and an independent fortnightly service from India. I am sure we can get the parties to do it. Parties are in the field already, willing to carry the mails, but, as long as you continue the subsidy exclusively to the Peninsular and Oriental Company, they can do anything they please.

2333. Your suggestion is, that the Peninsular and Oriental Company should be left in the enjoyment of their present contract to convey the mail fortnightly to Bombay, but that tenders should be invited for a service to run every alternate week?—Yes.

2334. Would you exclude the Peninsular and Oriental Company from the privilege of tendering for that service?—You need not exclude them; if it is advertised in India to be given by the Indian Government, the Peninsular and Oriental Company will not get it, let their tender be what it may.

2335. Surely you would not, as a matter of principle, for the purposes of competition, exclude the Peninsular and Oriental Company from tendering for that alternate service?—If there were any chance of their getting it, I would: because I am sure that the public interest would eventually be served by getting competition established upon any terms.

2336. You are so anxious for competition that even if the Peninsular and Oriental Company could afford to do the whole service, that is, the weekly service, to India, at a lower rate than the Peninsular

Peninsular and Oriental and the other one put together, you still think that they ought to be excluded from it, to keep up the principle of competition?—Yes, and I will tell you why. Mr. Hamilton, the representative agent of New South Wales, under date the 19th of March, 1863, gives an official statement of the grounds on which the colonies of New South Wales and New Zealand claim the establishment of a monthly postal service, *via* Panama, and remarks, “The conduct of the Peninsular and Oriental Company in reference to the Australian mail service between 1853 and 1860, proves that their object has been to gain a close monopoly of steam-packet traffic in the Indian Ocean; when the market has been thrown open to competition, they have tendered at a price at which the service could not be profitably worked, and having run competitors off the line, they have made their own terms with the Government; the effect of this monopoly is, that postal communication between this country and Australia is wholly inadequate.” We entirely agree with the colonial view of the subject.

2337. Did you receive any answer to that proposal to Mr. Hill, which you stated to the Committee just now?—I was told by Mr. Hill that it could not be entertained.

2338. Are the Committee to understand it to be your opinion that no subsidy would be needed at all, if the whole service were thrown open to general competition, and that persons willing to undertake it, have expressed their readiness to be content with the ocean postage?—Quite so, if the speed of the last three years is to be the mail speed. If we are to have a higher speed, no doubt we must have a subsidy.

2339. Do you think that any steam companies would be ready to bind themselves under the obligation to carry the mails in the manner that the contract packet service does?—I think so, Mr. Riddell, our Post Master General, states his belief in this correspondence I have referred to, that our postal service is very nearly self-sustaining, so that as much, nearly, would be given by the ocean postage as is now given by the subsidy.

2340. What do you mean by ocean postage?—The amount that is charged on the letters, for the sea part of the voyage, 4 *d.* per letter to India.

2341. You stated, just now, did you not, that you thought that there would be no need for the vessels to stop at Aden?—Only as a question of fuel; it is 14 days from Suez to Bombay, and it is the same, by a slow vessel, from New York to Liverpool.

2342. You will bear in mind that a vessel going from Suez to Bombay must necessarily take in her fuel at a most expensive place for receiving it?—At the present time vessels coal as largely as they can at Bombay, where it is cheaper than any where else; but I believe that the cost of fuel at Suez is likely to fall very materially. No doubt if they have to coal simply at Suez and Bombay, the coal will cost a little more than it does now, as coaling at Aden is not so expensive as at Suez.

2343. Do you think that the effect of establishing competition would be beneficial to the public?—Immensely so.

2344. Do you think that it would reduce the rates of passage money?—I think it would reduce the rates of passage money by one half, on the Bombay line.

0.43.

2345. Do you look for a great increase in the number of passengers going between Suez and Bombay, when the railways in India are opened?—A very large increase indeed; I should say that it would reduce the rates of passage one half, at all events, upon the rates which were charged when I came home, nearly two years ago; I believe they have made some little reduction since. The public gain would be very great if better speed were made. If four days only were saved in the interest upon the specie which is carried for India, it would represent an amount of from 30,000 *l.* to 40,000 *l.* a year. On the Bombay line we are charged 2 per cent. for the freight of all treasure that goes to Bombay; while the company charge no more to Calcutta, which is 2,000 miles further, and only 2½ to Hong Kong. The rate to Bombay plainly should be no more than 1½ per cent.

2346. Would that be a fair proportion according to the distance that the specie is carried?—Yes; it is more than a fair proportion; and as our average imports of bullion are 10,000,000 *l.* a year, the half per cent. wrongly exacted is 50,000 *l.* loss to the community.

2347. You attribute the whole of that to the effect of there being no competition?—Yes; and the passage-rate was 75 *l.*, instead of about 40 *l.*

2348. You stated, did you not, that they refused to carry second-class passengers?—I am sorry to say that Mr. Howell told you that it was not so. I affirm that second-class passengers are carried only as a matter of favour. The Company require every second-class passenger to sign a certain undertaking, when they do give him a passage, and I will read it to the Committee: “Gentlemen,—With reference to the second-class passage which has been allotted to me, from

to I hereby acknowledge the conditions upon which second-class passengers are conveyed on board the steamers of the Peninsular and Oriental Steam Navigation Company as expressed in the passage-ticket; and being fully aware that the Company do not engage to provide sleeping cabins or berths on board their packets eastward of Suez for second-class passengers, undertake to accept such accommodation in this respect as the Company may appropriate to me; and, moreover, bind myself not to make any claim whatever upon the Company, should they be unable to provide me with a berth.” The result is that no one can go second class; there are no berths and no accommodation, and a man who does venture upon it, seldom does so twice.

2349. Is there a very strong sense of grievance in the community of India upon this point?—You may judge of that by my evidence; I am a reflection of that feeling.

2350. Do you represent the opinion of Bombay only?—No; of all India.

2351. You have no doubt upon that point?—None whatever.

2352. Do you know anything of the feeling in the Australian colonies with regard to this service?—I have seen it stated, that according to the last Australian papers, the question has been brought before the Legislative Council in Sydney, and that there are complaints of the same character against the monopoly which this company has established, and the way in which it is used.

2353. Mr. Marsh.] When you talk of Sydney, do you know what were the old rates to Australia?—No, I do not know.

2354. Chairman.]

R. Knight,
Esq.
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R. Knight,
Esq.

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2354. *Chairman.*] With regard to postal arrangements, I think there is no question but that the general view in India, at the present moment, is that Bombay should be the general steam port of India in connection with this country?—There is no difference of opinion upon the subject; all are agreed upon it.

2355. Has any opinion been expressed in India upon the circumstance that the charge for the mails between this country and China is borne, to a certain extent, by the Indian Revenue?—I believe that is an old and great grievance; the East India Company protested against it when the arrangement was first made by the Treasury, and I rather think that it has been re-protested against in a late letter from our Director General of the Post Office. It certainly is inequitable that we should be charged one-half of the cost of carrying the China mails, and, if I mistake not, of the Mediterranean mails also. I rather think that one-half of the cost of carrying the mails to Gibraltar, to Malta, and to Egypt, is borne by us, in which we have not a fraction of interest (and there is a most important mail with Egypt); and we have to pay half of the cost of carrying the mails to Ceylon, and to China. The same was, until lately, the case with regard to Mauritius, and to Australia. I believe that there has been some change made in the Mauritius and Australian mails; but, if I mistake not, we are still required to pay one-half of the loss that arises upon all the mails which I have enumerated, though we have no interest in them whatever, except in the case of the mail to China, in which we have a small interest, which interest may be about one-fourth or one-fifth, probably, compared with what the English interest is.

2356. Speaking from an Indian point of view, your opinion seems to be this, that in making Bombay the principal port of communication for India, India should pay only its proportion of the charge of keeping up the weekly communication between London and Bombay, and that India should not be in any way chargeable with any portion of the expense of keeping up the mail communication between London and China, and London and Australia?—I believe that as regards London and Australia we are now liberated from the charge; but it still exists, if I mistake not, in the case of the Mediterranean mails, the Egyptian mails, and the Ceylon and the China mails. We have no interest whatever in the carriage of any of those mails, except the China, and there our interest is a very subordinate one.

2357. I understand that the strength of your main charge, so to speak, is that at the present moment, India does not get her weekly mail at Bombay, because the India Office here will not consent to provide the small additional amount of postage which is proposed to be charged by the Postmaster General; or to bear, as the Treasury suggest, the additional expenditure?—Quite so. I will read to the Committee, if they will allow me, an official statement, upon which I ground that complaint. Mr. Riddell, the Postmaster General of India, under date the 19th February 1866, writes: "The present postal requirements of India, in connection with Great Britain and Europe, will be satisfied with a weekly mail to Bombay. The cost of the Mediterranean lines might be reduced, without inconvenience to the public, by a reduction in the number of mails sent *via* Southampton; and even

if this were not done, the additional cost of conveying four mails in the course of a year from Marseilles or Brindisi, cannot be serious." "The subsidy for the line between Calcutta and Galle may be altogether withdrawn, as the line will be useless for postal purposes. The line between Galle and Suez must be continued for the conveyance of the China and Australian mails; and if the Indian mails are no longer sent by that route, the cost of the Australian and China mail service will be increased by the sum heretofore paid by India; and it would appear from the tenor of Mr. Hill's letters, that this consideration has been the ground upon which all connected with India have been so long denied the advantage of a weekly mail to and from England, and even of four mails in the month. It is difficult to understand how the revenues of India can equitably be charged for the maintenance of a service which is useless to India; and which, for some time past, has acted as an obstacle to a very great public and private improvement. But, if on any ground of imperial policy, it is considered right to charge upon the revenues of India a portion of the subsidies paid to British mail steamers employed between Australia, China, Ceylon, and Suez, I submit that the charge should be a distinct one, and not be allowed to interfere with the improvement of the postal communications between Great Britain and India." Those sentiments are endorsed by the Government of India. Mr. Riddell does not seem to be aware that India is being made to share the cost of the Egyptian and Mediterranean mails. The Post Office Packet Service Return of the 2d of March 1865, professes to be an exhaustive statement of all the postal subsidies of this country; and the Mediterranean mails, and the Egyptian mails, are plainly included under the head of India.

2358. *Mr. Childers.*] Do you think that the best future arrangement would be this, that there should be a fortnightly service between Suez and Bombay, in the hands of the Peninsular and Oriental Company, and a fortnightly service in the hands of another company?—Yes, another company subsidised from India.

2359. Do you think that the ocean postage would bear the expense of the second company?—I believe it would bear the expense of both.

2360. Will you state to the Committee what you mean by the ocean postage?—The 4 *d.* per letter referred to by Mr. Hill.

2361. But is not that 4 *d.* the charge for conveying a letter from India to Suez and on to England?—Yes; I base my belief upon the statement of our Postmaster-General; I have not myself the data to make the calculations to which you invite me, but I will read to the Committee what he says. In the same letter from which I have quoted, he says: "I think there is reason to hope that, if the rate of postage is not raised, and if a weekly mail is granted, the receipts from postage will, before long, cover the whole cost of the service."

2362. I am asking you as to your own opinion, not as to the opinion of the Postmaster-General of India, which will come to us officially; I want to know why you attribute 4 *d.* a letter as the ocean postage between Bombay and Suez, and whether, in fact, 4 *d.* is not the whole postage between Bombay and England?—I should have said a proportion of 4 *d.*

2363. The distance between Bombay and Suez is about the same, is it not, as the distance between

tween Suez and England?—It is more on the Indian side.

2364. But by Marseilles, which is 6 *d.*, it is about the same as the charge to Bombay?—Yes, about the same.

2365. Therefore, strictly speaking, the ocean charge between India and Suez should be 2 *d.* rather than 4 *d.*?—It should be about 2½ *d.* for distance merely.

2366. Are you prepared to say that a company could be found to take the fortnightly service for 2 *d.* a letter?—I am not prepared to say that, but I state my impression that, from the growing extent of the Indian mails and the statement of the Director-general, in which I have confidence, the ocean-postage would be sufficient. I have not the means of going into the calculation.

2367. But from the opinion of the Postmaster-general of India, you think that a company could be found to perform a fortnightly service between Bombay and Suez for 2 *d.* a letter?—I think it is very likely.

2368. How would you arrange that service on to England?—The question has come up many times in conversation with gentlemen connected with the Companies in India to which I have referred, and they tell me that they could arrange with half a dozen lines to carry the mails on this side, and that all the difficulty is on the other side.

2369. Is it your opinion that a company would be found to enter into a contract to convey the mails, at exact time, between England and Alexandria fortnightly?—I have a very strong belief that that might be done.

2370. Have you any evidence in support of this impression of yours?—The evidence of close conversation with those who are interested in these matters; there are companies in India who have made all these calculations.

2371. Then it is your impression, that in the present state of commercial relations between England and Alexandria, a company could be found to convey the mails at exactly fortnightly periods, running 11 knots an hour, for the postage of 2 *d.* a letter?—No, I did not say that; I said at the present speed. If we are to have a higher speed, we must have a subsidy.

2372. But you think that, at present, a company could be found who would contract to run between England and Alexandria, at the present rates of speed, for 2 *d.* per letter?—Yes, in correspondence with a company on the other side, because of the lucrative traffic in passengers, specie, and so on.

2373. Starting with that, your plan would be to have a new through company from India to England, running fortnightly?—Yes.

2374. Does not that involve a service from England to India?—Yes; but I wish to maintain the idea of the thing being managed in India. You start your service from this side fortnightly, and we will correspond with a fortnightly service from India.

2375. Is it your plan, that India is only to manage the homeward service, and England the outward service?—Precisely so; probably the cost will have to be divided.

2376. Do you mean that the service homeward from India, once a fortnight, is to be under the management of the Indian Government?—Yes.

2377. But the service outwards, equally once a fortnight, is not to be under the management of

the Indian Government?—No, under the General Post Office.

2378. But that the same company is to carry out the homeward and the outward service?—No, the Peninsular and Oriental Company should retain its present service.

2379. You wish that there should be a weekly service out and home?—Yes.

2380. You wish half the homeward service to be in the hands of the Indian Government?—Yes; starting alternate weeks from Bombay with the Peninsular and Oriental vessels.

2381. But no part of the outward service to be in the hands of the Indian Government?—Once a fortnight only.

2382. In correcting your previous evidence, what you mean is, that half the service, both the homeward and the outward, should be in the hands of the Indian Government?—Yes.

2383. Therefore, the Indian Government would be contractors for the service in the Mediterranean?—Yes.

2384. Have you reason to believe that the Indian Postmaster-General would carry on the service in the Mediterranean any better than the English Postmaster-General carries on the service beyond Suez?—I do not care who carries it on, if you only deal equitably with us; but the Post Office of this country is not dealing equitably with us, and, because of that, I wish to see the service in the hands of the Indian Government.

2385. Do you think that the Postmaster-General of India would deal more equitably with England than the Postmaster-General of England would deal with India?—I am very sure you would make him do so.

2386. Do you mean that there is more pressure of public opinion in India than in England?—No; more here than there.

2387. The influence of public opinion upon the Government of India, you think, is greater than the influence of public opinion upon the Government of England?—Parliament will take care when the estimates come before it that no improper charge is imposed upon the English Treasury by the Indian Government; but whatever charges the English Government impose upon the Indian Treasury we are compelled to submit to.

2388. How shall we be able to check the charge upon England which is in the hands of the Postmaster-General of India?—Well; I am very sure that if the Indian Government were disposed to make the English Treasury pay part of the cost of carrying our mails between Bombay and Kurrachee, you would strike the charge out of the account immediately. In like manner, we say that we have no interest in your Egyptian mail, but we cannot strike the charge out of the accounts.

2389. Then, on the whole, your plan is that one of the alternate weekly services throughout from England to India, and from India to England, should be in the hands of a distinct company from the Peninsular and Oriental Company, and under the management of the Indian Government?—Yes; and I recommend its being on the Indian side, simply that we may not be sat upon by the English post-office.

2390. It is your belief, is it not, that the whole of the passenger traffic between England and India will be in future to Bombay, and from

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R. Knight, Esq.
8 May 1866. Bombay to Calcutta?—Not the whole of it, but the largest part of it. I have no doubt Mr. Howell is right, that as a very large number of passengers now go from Southampton in preference to the Marseilles route, especially ladies, so you will find families returning from Bengal will not face the overland railway journey, they will prefer the sea passage from Calcutta; but we shall drain the north-western provinces almost entirely.

2391. In entering into any contract, you would look exclusively to Bombay as the Indian terminus?—Yes, there cannot be a doubt of it.

2392. With respect to China, you think that India should bear no proportion of the loss on the China service?—I do not say no proportion, but when you make the proportion one-half, it is inequitable. We are independent of any postal service with China started from this country, because we have lines of steamers constantly running with opium from India to China, and it would be the easiest thing possible for the Indian Government to come to some arrangement with them for the carriage of our China mail; I think we should pay a distinct charge based upon the approximate proportion of our interest in the China mails is, say one-fifth or one-sixth. If it really is half, we are willing to pay half.

2393. Is it not a fact, that in arriving at the proportion of half, Mr. Wilson stated that the commercial interest of India with China was as large as the commercial interest of England with China?—I am not aware.

2394. It was stated in the Treasury Minute upon which that division was founded, that the interest of India in the China commerce was as large as that of England?—Whether Mr. Wilson said so or not, the fact is otherwise. It must be borne in mind that a very large proportion of the Indian mails to China are English in their interest, not Indian. The banks and the East India houses are not Indian in any just sense whatever; they are in India for the sake of dividends and fortunes, to be carried where? to be brought to this country. India has the smallest possible interest in all that portion of the mails. Mr. Wilson was not a good authority upon Indian matters; he was not well informed upon them.

2395. You think that the fact which Mr. Wilson stated, that the interest of India in the China commerce was not as large as the interest of England in the China commerce, is not the case at the present time?—No.

2396. Therefore, the nett loss on the China mails, in your opinion, should be very differently divided?—Very differently.

2397. With respect to the Australian service, are you not aware that, instead of India bearing no proportion of the loss, they get credit for a certain amount of the receipt?—Yes, I believe that is the case.

2398. So that if the Australian service were cut off, and the whole of the mails went by Panama, India would lose?—Not if you give us a Bombay mail. At present we are only being recouped from Australia that which was wrongly taken from us for a good many years under the old arrangement; but I doubt very much whether we are getting a full equivalent.

2399. As a matter of fact, at the present moment, if the Australian mails did not connect with the Indian mail, India would lose what now

comes in to her credit?—As long as we are made to carry useless mails to Calcutta and Galle.

2400. But if the Australian mail connected at Aden or Suez, there would be a credit to the Indian service, without any additional charge being thrown upon India?—There would be a small credit on account of the Mediterranean portion of the service.

2401. And if at Aden, on account of the Red Sea service as well?—Yes.

2402. You stated, did you not, that the effect of the competition of another fortnightly Company's service, would be to reduce the rates of passage money?—Yes, heavily.

2403. There is at the present time, is there not, to Calcutta, the competition of the French Company?—Yes.

2404. By that line, is the time to Calcutta the same as the time of the Peninsular and Oriental service?—I believe so.

2405. Has that competition reduced the rates of passage money?—I can tell you what the rates of passage money on the Calcutta line are where there is competition, and what they are on the Bombay line, where there is no competition.

2406. Did the establishment of that line reduce the Calcutta rates of passage money?—I do not remember, not being much interested in that line.

2407. Do you happen to know whether it has reduced the rates to China?—I do not know.

2408. Does it necessarily follow that the establishment of a second company on a line, which only had one company before, does reduce the rates of passage money?—Not necessarily; but I think you may be reasonably sure that it will do so in such circumstances. When the Collins' line started in opposition to the Cunard line, the rates of freight fell from 8*l.* to 3*l.* immediately; and the passage money from 50*l.* to 26*l.*, and they have remained at the lower rate ever since.

2409. Although the Collins' line has been discontinued?—Yes, but others have started; there is the Havre line, and the Southampton line, and the Bremen line. I will give another fact. On this side of Suez we are carried as reasonably by the Peninsular and Oriental Company as we could wish to be, because we can get to Alexandria by half-a-dozen different lines of steamers.

2410. My question was not as to half-a-dozen different lines, but as to two lines; is it likely to be the effect of substituting two lines for one that the passage money will be reduced?—It is certain to be the effect, unless they play into each others hands.

2411. Is it not positively certain that they will play into each others hands?—No, it is not certain.

2412. Has not all our experience of two lines of communication clearly been, that the two companies do play into each others hands?—Let us get two lines started, and, I believe, we shall very soon get three or four.

2413. Your prospect of a reduction of the passage money seems rather to depend upon your getting three or four lines, than upon getting two?—It depends upon getting in the end of the wedge. Only last week a friend, just arrived from Bombay, told me that at this moment no person will go by the Peninsular and Oriental vessels if they can get by the other company's ships that are now running. There is a Bombay Company now running steamers, for the mere sake of the trade between Bombay and Suez, and they are crowded with

with passengers. I am told that the Peninsular and Oriental Company only get passengers who have been refused at the other office, from the vessels being full.

2414. Has the effect of that been to reduce the Peninsular and Oriental passage-money?—You can now get by this company from Liverpool to Bombay, first class, for 65*l.*, and the Peninsular and Oriental Company's charge is 85*l.* from Southampton.

2415. Have the Peninsular and Oriental Company reduced their rate in consequence of this competition?—No, it matters not to us whether they do or not, so long as there is an alternate line by which we can travel cheaper.

2416. Are you of opinion that the China mails ought to continue to be carried by Galle, or would they go from Bombay overland to Calcutta in future?—I have not paid enough attention to the point to be able to give you an opinion.

2417. The object of my question is this, will the establishment of a weekly service by Bombay dispense in any way with the less remunerative future service from Suez to Galle, and Singapore?—Perhaps the best answer I can give, is to say, that we are independent of your China service altogether; we have steamers running constantly with opium from Bombay to Hong Kong, and Shanghai, and they would carry mails; I believe it is the case, that our steamers pick up your English mails at Galle, and carry them on; under no circumstances shall we be without steam postal communication with China, because of our opium trade.

2418. So that it is indifferent to India generally whether the present line to China is continued in future, or is carried through India?—I would not say it is quite indifferent, but it is a matter of small moment to us.

2419. Speaking on the part of India generally, what is the general opinion as to the messageries?—That it is a most happy thing for the other side of India that the messageries exist, because if they did not exist voyagers would be charged passage rates, such as we have been charged, and are being charged, on the Bombay side.

2420. Would it, do you think, be agreeable to the Indian community, that the assistance of the messageries should be obtained in any general system of postal communication with the East?—We are quite cosmopolitan enough for that; we are not at all jealous of the messageries.

2421. Sir Charles Bright.] Have you had any experience of the working of the telegraph in India?—A good deal.

2422. What is the general opinion respecting the system of telegraphy there?—That it is very inefficient.

2423. To what places do those complaints extend generally?—I think they are pretty general throughout the country; we had no line when I was in India that worked well, and from the papers recently received, I find there is little amelioration, if any.

2424. Are the complaints made as largely as before?—I think so.

2425. What is the time that it generally takes for a message to be transmitted from Bombay to Kurrachee, for example?—That line is in a frightful state; I take from my own paper, the "Times of India," of the 9th of March, the following extract: "The wretchedly inefficient working of the line between Kurrachee and Bombay during the period under review will be seen from the following compilation from the

daily reports supplied by the Indian Telegraph Department itself." Then there is a maximum and minimum delivery from February the 1st to February the 12th; the maximum delivery was four days and three hours and thirty-one minutes while one solitary message came through in four hours. The writer proceeds: "Only on two days does the line appear to have been even approaching proper working order, while for several days subsequent to the 12th, the line was closed for all local traffic. In the middle of January the Indian telegraph rates were considerably increased, and the public naturally looked for increased efficiency, but instead of this, we believe that the lines throughout India were never in a worse condition than they have been since the increased tariff came into operation."

2426. Is that March in this present year?—Yes, and it is the statement of a careful writer.

2427. How long has that state of things existed, to your knowledge, on the Bombay and Kurrachee line?—As long as I can remember; complaints have been incessant of the working of that line.

2428. Have any attempts been made to lay that state of things before the Government in India?—Yes. I hold in my hand a report on the defective working of the Indian telegraph, by Mr. B. C. Bayley, officiating director general of telegraphs, dated the 15th November 1865, addressed to the Government.

2429. Have the mercantile bodies at Kurrachee or Bombay ever memorialised either the Commissioner in Scinde or the Governor of Bombay on the subject, to your knowledge?—Many times. They have memorialised Parliament lately upon the subject. We have had incessant communications with the Indian Government upon the subject within the last few years.

2430. Without obtaining any change in the state of things?—We have received unsatisfactory replies.

2431. It is the fact, is it not, that the telegraph is frequently behind the mail steamer between Kurrachee and Bombay?—It must frequently be so from the figures I have read.

2432. Have you heard any complaints of messages being divulged by the signallers?—Constant complaints.

2433. What is your view of the working of the telegraph between Bombay and Calcutta?—My own experience of it was very unsatisfactory. Whether any improvement has taken place since I left India, I do not know; but I do not think there has been any; the line would even seem to be in worse order now than it ever was.

2434. What used to be about the average time during your experience of it when in India?—It was so uncertain that I should be sorry to attempt the average; we have had a message in a few hours, and we have been many days without a message. We had a public service in connection with my office, and were sending messages daily.

2435. Was the same state of affairs existing between Bombay and Madras?—All over India.

2436. What do you attribute that to?—In the words of the "Bombay Gazette," "A great portion of the lines stand upon wooden posts, which are scarcely strong enough to bear the weight of a single wire. The posts are overturned and the wire is lying upon the ground. The department had forgotten to order insulators, and the wire had to be affixed without them, and in consequence they have become unfit for use; and

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R. Knight, "and the signallers are unfit for the work, some unable to read more than six or seven words." That is simply an epitome of the Director General's report.

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2437. *Mr. Marsh.*] When you talk about the opposition company from Bombay to Suez, they are small and slow ships, are they not?—I do not know the size of their vessels. The company has started since I left Bombay.

2438. Do you think they are fit to carry the mail against the monsoon?—The vessels by which we proposed to carry the mail were certainly fit.

2439. What is the tonnage of them?—Twelve hundred tons, many of them.

2440. Do you think 1,200 tons enough?—Yes, and we should immediately have laid down a much larger class of vessels if we had obtained the contract.

2441. You stated that those Peninsular and Oriental Company's ships always go very slowly; do you notice that they ever break down altogether, and do not carry the mail, but come back, in the case of the monsoon?—I think that the company deserves the praise of having been very regular in that sense; I think we *have* had a break down, but it has been very rare.

2442-3. Do you know whether the Bombay mail of last June ever reached Suez?—I do not know; I think we lost no mail last year.

2444. As to the mail that left Bombay the latter end of June, do you know whether it ever got to Suez?—I do not know.

2445. You stated that the people in Australia managed their own mails; are you not aware that they are under the same engagement with the General Post Office as the people in India?—I stated that they treat upon equal terms with you; you do not interfere with their revenues, as the Treasury here interferes with our revenues.

2446. You stated to the Committee the agreement which the second-class passengers sign, agreeing to be content without a berth; do the Peninsular and Oriental Company ever do the same during the full season with regard to first-class passengers now; do they ever make them sign an agreement?—The suggestion is altogether untrue; you cannot get second-class passages, except as a matter of favour, by the Peninsular and Oriental vessels. I have tried myself, as a matter of charity, to get a man carried second-class from Bombay to China, and, although the company knew that the money had to be raised by charity, the agent said that the orders of the home direction were imperative, and that he could not give him the passage.

2447. I ask you whether they do not sometimes make the first-class passengers sign an agreement to be content without a berth also?—They may have done so under peculiar circumstances, but this is a systematic thing towards second-class passengers.

2448. *Mr. Ayrton.*] Is it not sometimes the case where a ship is full, that they allow passengers to go who will be content to sleep upon the deck, they paying the full first-class fare to go as deck passengers?—I have heard so.

2449. *Mr. Marsh.*] Do they sign an agreement to that effect?—I think not.

2450. *Chairman.*] That is only where the steamers are full; it is at the option of a man whether he will go or not on those conditions?—Yes; my complaint is that, whereas the Cunard steamers give three or four classes of accommodation, the Peninsular and Oriental Company

give but one class of accommodation, and provide no second-class accommodation; so that in the case of an Indian officer ordered home with a wife and children, he frequently cannot pay the passage-money, except by going heavily into debt.

2451. *Mr. Marsh.*] The Messageries Imperiales provide very good second class accommodation, do they not?—I do not know, they do not run on our line.

2452. *Mr. Ayrton.*] Do you know whether there has been any classification with regard to officers coming home, some by the Peninsular and Oriental steamers, and some by the French Company?—I think there was, now you name it, but I had forgotten it; I have an indistinct recollection of something of the kind.

2453. Are you aware that the French company made a classification so that you could come home at a lower rate than the rate of the first class passengers?—Yes, and I think the Peninsular and Oriental Company made a remonstrance with them upon the subject; at all events it was so stated in India.

2454. Do you think that there is a general impression in Bombay, with regard to the Peninsular and Oriental Company, that its affairs are conducted with great waste and extravagance?—Yes.

2455. And that that pervades the whole of their administration in Bombay?—I have heard extraordinary stories of the way in which their stores are managed.

2456. That is the general impression amongst the community?—Yes; I think it is the general impression amongst well-informed people.

2457. Are you aware whether at Aden or at Suez any trouble has been taken to preserve the coal, or is it kept in heaps exposed to the atmosphere?—What dangers it may be exposed to I do not know, but there is no protection whatever, at all events, at Aden.

2458. Are you aware that in consequence of that there is a constant complaint of the deterioration of the fuel in the steamboats on the eastern side of Suez?—I should quite expect it, but I did not know it to be the case.

2459. Do you know whether the loss of speed is chiefly attributable to that?—No; I do not.

2460. Do you think that the practice of putting an unlimited quantity of wine and spirits on the table to be consumed, leads to great waste on board the Peninsular and Oriental Company's vessels?—Yes; I believe it to be a most wasteful plan, and it is very distasteful to passengers, as it is made a pretext for maintaining high passage rates.

2461. Do you not think that it tends also to do a considerable amount of mischief in exposing people who are going out to this unlimited supply of wine and spirits, who have not been accustomed to it before?—With very young people that may be the case; I do not think that it amounts to a scandal.

2462. Do not you think that the consumption is very much increased in consequence of those things being given without restraint?—There is no doubt that it is so, especially in the case of youngsters.

2463. Have you not often heard people in the company's steamers, say they would rather drink for the purpose of punishing the company for their heavy passage rates?—I have heard such things said.

2464. Have

2464. Have you had your attention called to this alleged contract entered into between the Postmaster General and the Peninsular and Oriental Company, at the beginning of this year?—I have never seen it; I have heard it referred to here.

2465. Do not you think that the people of India will be very much astonished when they are told that there is a Standing Order of the House of Commons, to the effect that no such contract should be entered into except subject to the consent of Parliament, and yet that this contract has been entered into in the face of the Committee appointed to inquire into the subject?—Yes; that very resolution of the House of Commons was pleaded by Mr. Hill as an effectual bar to coming to any arrangement with me, even for the payment of the ocean mail postage.

2466. Then you and a large number of persons in India would be very much astonished to find that that contract has been entered into, in total disregard of that resolution?—We should be amazed.

2467. Have you looked at the rate at which, and the time within which, the service is to be performed under this contract?—I have not seen the contract at all. I did not know of its existence.

2468. With regard to your statement, will you observe that the contract is for the service between Suez and Bombay in 312 hours; but it further allows 24 hours without a penalty, making 336 hours, and that, therefore, the contract is now for 9 knots an hour?—I can well suppose that.

2469. But will not it be very astonishing to the people of Bombay to find that in this year a contract has been entered into for a service of 9 knots an hour?—Very astonishing indeed.

2470. Will they not be very much further astonished, when they are told that for every 24 hours added to that time the small penalty of 50 *l.* is to be paid?—I have already expressed my amazement at it.

2471. The saving to the company for every 24 hours, in point of coal, would be 300 *l.* or 400 *l.*, at the rate which has been taken, would it not?—Yes, it would be very large.

2472. That would bring it down nearly to 8 knots an hour, would it not?—Yes.

2473. Therefore, it would be a saving of several hundred pounds?—Yes.

2474. For which they will have to pay the Government 50 *l.*?—Yes, they will pay 50 *l.* to escape the expenditure of 300 *l.* or 400 *l.* for coal.

2475. Therefore the penalty, in point of fact, is a premium upon the delay of the mails?—Plainly.

2476. Mr. Childers.] Do you mean that the agreement that was entered into last February, increases the time between England and India?—I have never seen the contract.

2477. Mr. Ayrton.] Are you not aware that the Government have abandoned their power of having efficient vessels in favour of this contract for a time?—I have heard it stated here.

2478. Mr. Childers.] Have you not seen this agreement?—I have not seen the agreement.

2479. And you know nothing of it except from rumour?—No.

2480. Mr. Ayrton.] Taking the statement of the contract to be that which I have given you, would it not excite amazement among the inhabitants of Bombay that such a transaction should go on with the Post Master General of this country?—Yes.

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2481. Mr. Childers.] Are you aware that the time between England and India is fixed in the former contract?—But there are no penalties.

2482. I am not upon the question of penalties, but the time between England and India is fixed in the former contract, is it not?—I think the time is not fixed.

2483. Is not there a schedule to the contract as to the time?—Not in the Parliamentary Papers.

2484. If you will refer to the printed papers of the 10th May 1865, you will find the contracts there set out in full?—I have not seen those papers.

2485. Mr. Stansfeld.] Have you any reason to think that Bombay could furnish such a fortnightly service as you have been speaking of?—I am persuaded that it can; I am sure it can.

2486. And on whatever terms that service might commence, may the Committee take your view to be that would end in being a service which would require no subsidy?—I think so; it would be content with the ocean postage.

2487. Do you know the docks at Bombay?—Yes, I listened with astonishment to Mr. Howell's statement upon the subject. I think I heard him say, that there were no docks at Bombay, except the Peninsular and Oriental Docks; but the Government has a magnificent establishment there.

2488. Mr. Ayrton.] No, he states that it was not large enough to take in the largest vessels?—We very soon shall have docks large enough, at all events, at the rate that we are progressing there. Then, at Suez, the Messageries Imperiales Company are constructing very fine docks, upon which the Peninsular and Oriental Company themselves will depend.

2489. Mr. Stansfeld.] You probably do not know the dimensions of the Government dock at Bombay?—No, I do not.

2490. Your proposal was, that a contract for the alternate fortnightly conveyance of the mails between England and India should be made at Bombay?—Yes, at Bombay, by the Government of India.

2491. You mean by the Director General of the Post Office acting for the Government of India?—Yes.

2492. That contract you would imagine would be made in consequence of a previous understanding between the Government of India and the Government of England?—Yes, it would be negotiated between them.

2493. Therefore, from the fact of the contract being so entered into, it could not result in any terms which would press unduly upon England?—Not at all.

2494. And you think that there would be, at Bombay especially, a readiness on the part of Companies possessing steam vessels, to compete in this respect with the Peninsular and Oriental Company?—I am quite satisfied of it.

2495. And that they would meet with considerable public support in so doing?—They would have all the public sympathies with them.

2496. I think you stated that the result of competition would, sooner or later, be a great reduction in the passage money and the freight?—Unquestionably.

2497. They would be an advantage, though not a postal advantage, to both England and India, would it not?—It would be a very great advantage to both countries.

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2498. In your opinion, that is one element, which the Governments of England and India might perfectly well take into consideration in entering into a postal contract?—Yes, that is my opinion.

2499. Mr. Childers.] You are not aware that the contracts with the Peninsular and Oriental Company, established before last February, had a time table attached to them, as part of the contract?—No, I was not aware of it; but I believe I state the fact, when I say that penalties were never inflicted in any case.

2500. Penalties were never inflicted till last February, but they inflicted penalties last February?—That dates very nearly from the establishment of this Committee of Inquiry.

2501. Do you mean to imply by that that the agreement made last February had some connection with the appointment of this Committee?—That there is a very comfortable understanding between the Peninsular and Oriental Company and the Post Office, I am satisfied.

2502. Do you mean to say that the agreement which was entered into last February had some connection with the appointment of this Committee?—It looks very like it.

2503. Mr. Marsh.] You stated, did you not, that the coal at Aden and at Suez was exposed?—At Aden.

2504. Are you aware that it never rains there so that it does not much signify?—Mr. Howell stated, I think, that the exposure of the coal to

the sun caused a great amount of evaporation of the valuable heating qualities in coal.

2505. Mr. Laird.] Do you know what the contract speed was between the Peninsular and Oriental Company and the Post Office?—Ten knots an hour.

2506. Was that while the vessels were under weigh, or from point to point?—The clause in the contract is this, "That the said Company shall, and will, at their own cost and charge, at all times during the continuance of this contract at a speed which on the average of each voyage of each vessel shall not be less than 10 knots an hour, conveying Her Majesty's mails," it does not say from point to point, or not.

2507. In stating that they only go 8½ knots an hour, do you mean to say that they have not gone within a knot and a-half of the required speed in the contract?—Yes, within a knot and a-half on the Bombay line last year; a knot and a-half slower.

2508. You have, perhaps, heard Mr. Hill, of the Post Office, say, that the contract had been performed, on the whole, satisfactorily?—I think that the bland assurances of the Post Office on the subject are not worth very much.

2509. Mr. Ayrton.] The sum of your opinion is, that if all the power of India were concentrated in Bombay, there could be an efficient weekly communication with Suez at a comparatively little expense?—Undoubtedly.

EDMUND D. BOURDILLON, Esq., Examined.

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2510. Chairman.] WHAT office do you fill in the Department of the Secretary of State for India?—I am Secretary in the Public Department in which the charge of the Post Office is included.

2511. You are probably aware of the correspondence which has been put in by Mr. Frederick Hill?—Yes.

2512. It appears that the last letter upon the general question, addressed from your office to the Post Office, is dated the 5th of October last year; has any correspondence passed since that time?—Yes, I have some correspondence here, which I will lay before the Committee (*delivering in the same*).

2513. What is the general tenor of the correspondence which you are now putting in?—The whole of the correspondence between the India Department and the Post Office, in the course of last year, was sent out to the Government of India, in a Despatch of the 30th of December last, and a reply has now been received from the Government, expressing its opinion on the correspondence that passed with the Post Office.

2514. Will you read the letter from the Government of India?—This is a letter to the Secretary of State for India, dated the 22d of February 1866: "With reference to your public Despatch (No. 92, dated the 30th of December, and in continuation of the Governor General's telegram, dated the 12th instant), we have the honour to submit for your consideration the accompanying letter received from the Director General of the Post Office in India on the very important question of establishing a weekly mail between England and Bombay."

2515. Mr. Stansfeld.] Will you explain what

that telegram was?—This was a telegram sent off on the 12th of February: "A reply to your Post Office Despatch of 30th December will be sent by next mail. Meanwhile I desire to submit that, if it is meant to make India pay the whole cost of two additional mails between Suez and Bombay, we should be allowed to make our own arrangements as economically as we can either by accepting the Messrs. Stearns', or any other offer that may be eligible. The two additional mails are indispensable." Then the letter goes on to say: "In this letter Mr. Riddell appears to us to state with equal force and justice the position of this question so far as India is concerned. If it is admitted, as it is by the Postmaster General in England, and the point is indeed too clear to leave any room for question about it, that the postal service with India should in future be exclusively to Bombay, it is difficult to understand upon what ground it can be seriously maintained that the Indian Post Office should continue to be charged with a portion of the cost of a postal subsidy given to steamers on the line between Suez and Galle for the conveyance of China and Australian mails, or why any subsidy should be given to steamers running between Galle and Calcutta. We are of opinion that there need be no hesitation in undertaking for the present on the part of the Government of India to defray (in addition to a reasonable share of the cost of the service west of Suez, which is used for other than Indian mails) the whole cost of the mail service between Suez and Bombay; the entire sea postage charged on covers between the two countries being in that case, of course, credited to the Indian post-office. But we do not consider such an arrangement to be altogether unobjectionable. It would apparently be based on the expectation that

that the service must be carried on at a loss; and, if so, we venture to suggest that it would hardly be desired by England that the whole of that loss should fall upon the Indian revenues. It has been well pointed out in Mr. Merivale's letter to the London Post Office of the 5th of October, that the interests of England and India are jointly concerned in this matter. There are, no doubt, thousands in the former country to whom increased facilities for postal communication with India are just as important as they are to their countrymen living in India; and whether we look to the interests of this latter class only, or to the millions from whom Indian revenue is mainly drawn, and who have no direct interest in the matter at all, it would scarcely be generous for England to stipulate that the loss, which might arise from the establishment of a proper and efficient postal service between the two countries, should be borne wholly by the Indian taxpayer. We earnestly trust that this question will receive further and full consideration from the Lords Commissioners of Her Majesty's Treasury, and that some arrangement will be assented to whereby India may obtain the great advantage of a weekly postal service with Bombay, without being compelled at the same time to pay part of the expense of maintaining another line of communication, which is no longer of any service to India. To what an extent the postal service, *via* Galle, has ceased to be of use, even to Calcutta, we showed in our Despatch to you on this subject, dated the 23d November."

2516. *Chairman.*] The letter is, in fact, a protest on the part of the Indian Government against the revenues of India being made chargeable with the expense of that portion of the service between England and China, with which India has nothing to do?—Yes, and against the continuance of the useless service between Galle and Calcutta.

2517. Has a copy of that letter been submitted to the Postmaster General?—It was sent to the Post Office on the 5th of this month.

2518. I suppose the Committee may assume that the Government of India are entirely in favour of a weekly mail to Bombay?—Yes, they have been in favour of it for some years.

2519. Are you aware whether there would be any objection in this country to that weekly mail being despatched on a Friday?—There would be no objection as far as the Government is concerned.

2520. *Mr. Ayrton.*] I presume that it would be rather convenient that it should be despatched on a Friday, having regard to the arrangements of the India Office, would it not?—Yes, I think that that would be the best day that could be fixed upon.

2521. *Chairman.*] Upon the point of a weekly mail, it is stated in a letter from the Treasury to the Postmaster General, dated the 14th December last, that the Lords of the Treasury "would not feel warranted in sanctioning the large increase to the charge for postal communication with India, which would be entailed by the alteration in the service proposed, unless the Government of India should think fit to defray the entire amount of that increase"; that letter was, of course, in the possession of the Indian Government at the time that the letter which you have been reading to us was written, was it not?—Yes.

2522. Therefore they were fully aware of the

matter which was in controversy between the Post Office of India and the Post Office here?—Yes.

2523. And that is the opinion of the Government of India, deliberately expressed upon that point?—It is.

2524. *Mr. Childers.*] You are aware that the objection on the part of the Treasury had reference, not to the general question of a weekly mail, but to the amount which it was stated in the Post Office it would involve?—Yes, it is understood that the objection applied to the cost of an additional Bombay mail, in addition to the present subsidy.

2525. It was an objection to the specific additional charge at which the Post Office said they would have to carry out?—Yes, exactly.

2526. But it has never been understood that there was any objection on the part of the Treasury to a weekly mail, if the whole of the arrangements were revised?—I am not aware that there has been any distinct statement of such willingness, but certainly it is understood that the objection applied to the expense of the additional mails, in addition to the present expense.

2527. *Mr. Hill* gave it in evidence that, as far as he was concerned, he was aware that the objection was to that specific expense, and not to the general arrangement?—The objection, as expressed, certainly only applied to that.

2528. *Chairman.*] It has been stated in evidence by the Post Office, that the whole loss upon the India and China services amounts to 48,000*l.* a-year; does that occur to you as being a very large sum as representing the cost of the maintenance of the political and general connection between this country and India, whether it be borne by the Imperial Government or by the Indian Government, or borne in shares?—The Government of India have never considered so much the exact amount of the charge laid upon them, as they have had regard to the principle upon which the adjustment has been made; that is what they have looked to more than to the actual amount of the charge.

2529. Are you aware whether the covers which are despatched from the India Office are sent always bearing postage, or whether they are stamped?—I believe they all carry stamps.

2530. *Mr. Stansfeld.*] What papers are those which you have put in to day?—I have put in the Despatch from the Government of India, which I have just read; a previous letter from the Government of India, showing the way in which the transit of mails through India from Bombay will be carried out; a despatch from the Government of Bombay, on the subject of a tender made for the proposed additional mails to Bombay, by a local company; and the Despatches to the Governments of Bombay and India on the subject of this letter, and also a copy of a letter to the Post Office on the 5th of May 1866.

2531. What date is our last Despatch to the Governments of India and Bombay?—The Despatch to the Government of Bombay is dated the 31st of March, communicating the decision of the Secretary of State on the tender of Messrs. Stearns & Co.

2532. Will you read that letter to the Committee?—This is in reply to a Despatch from the Government of Bombay, which I propose to put in, but which I have not read, communicating a tender for the performance of an additional service

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vice by a local company: "I have considered in Council your letter dated 27th January (No. 7) 1866, forwarding correspondence on the subject of an offer made by Messrs. Stearns, Hobart, & Co., on behalf of the Bombay and Bengal Steam Ship Company, to carry two additional mails every month between Bombay and Suez, for a subsidy of 20,000 rupees a-month, and strongly recommending that this tender be accepted for one year. A Committee of the House of Commons has just been appointed to inquire into the whole subject of Telegraphic and Postal Communication between India and England, and I trust that the deliberations of the Committee may result, at no distant period, in that revision and extension of the postal service which is so much desired by all parties connected with India. But, in the mean time, I am not prepared to sanction the proposal you have now submitted to me."

2533. Will you go back to the proposal there referred to by the Bombay and Bengal Steam Ship Company, and give us the particulars of that proposal?—The proposal was to carry two additional mails every month between Bombay and Suez, for 20,000 rupees, or 2,000*l.* a-month, being at the rate of 1,000*l.* for each complete trip.

2534. At what speed?—A speed of eight knots an hour. The company added, "It may not be out of place to mention, although not as a part of our tender, that we have in contemplation the building of a class of boats not only larger and faster, but in every way superior to any now in the East, and capable of delivering the mails within 20 days between England and India; and plans for placing these vessels on the route are so far matured that should the tender we have made be accepted, and a reasonable prospect held out of our securing a fair subsidy through to England, we have little doubt of our being in a position to carry the project into immediate execution."

2535. All consideration of that proposal has been postponed, has it not, until this Committee shall have reported?—Yes.

2536. Have any other companies submitted proposals to the Government of India for a similar purpose?—There has been no formal tender made, but Mr. Riddell, the Director General of the Post Office, has stated, in a recent letter, that he had reason to believe that the British India Steam Navigation Company would be prepared to submit a tender for that service.

2537. Do you put in, to-day, a certain document, quoted by Mr. Knight in his evidence, namely, a Despatch or a Report from the Director General of the Post Office?—Yes, that is amongst those papers which I have put in. There is a Despatch to the Government of India, which has been prepared since the one which I have just read, to the Government of Bombay, in answer to the last Despatch from the Government of India, if the Committee would like to hear it read: "I have considered in Council your letter, dated 22d February (No. 3) 1866, forwarding, with reference to Sir C. Wood's Despatch, dated the 30th December (No. 92) 1865, a letter from the Director General of the Post Office in India, on the present state of the question of establishing a weekly mail between England and India, *via* Bombay. The subject is, as you are aware, much complicated by existing arrangements, but I shall not fail to urge on Her Majesty's Post-

master General, and on the Lords of Her Majesty's Treasury, the importance of putting an end to existing anomalies, and of providing means of extended postal communication between England and India on fair and equitable terms. A Committee of the House of Commons has recently been appointed to consider the whole subject of postal and telegraphic communication between the two countries; and, pending the result of the deliberations of the Committee, I cannot sanction the adoption of any measure which would involve additional charges to be borne exclusively by the revenues of India."

2538. What is the date of that despatch?—That has just been passed. The letter to the Post Office, communicating this document, and conveying the Secretary of State's opinion, is dated the 5th of May, and is in these terms: "With reference to Mr. Hill's letter, dated 21st December last, communicating the decision of the Lords of Her Majesty's Treasury on the subject of establishing weekly postal communication between England and India, *via* Bombay, I am directed by the Secretary of State for India in Council, to acquaint you that a copy of the correspondence which took place with Her Majesty's Post Office, in the course of last year, on the subject in question, was transmitted for the information of the Government of India; and I have now to forward, for the information of Her Majesty's Postmaster General, the accompanying copy of a letter from the Government of India, with its enclosures, relating to the present position of the question at issue. It will be observed that the Government of India continue to urge the establishment of the proposed additional service *via* Bombay, and express the hope that the subject will receive such further consideration from the Lords of Her Majesty's Treasury, as will result in the establishment of a weekly postal service with Bombay, and that India may, at the same time, be relieved from the necessity of paying part of the expense of maintaining the line of postal communication *via* Galle, which is no longer of any public service. The views of the Secretary of State for India in Council have already been fully and repeatedly expressed on this important subject; but as this is the first opportunity which has occurred of stating his opinion on the subject, as presented in Mr. Hill's letter of the 21st December last, I am directed by Earl de Grey to remark that, considering the question of an increase of the rates of postage to have been set at rest by the decision of the Lords of Her Majesty's Treasury, as therein communicated, his Lordship is not prepared to sanction, at the sole charge of India, the establishment of the additional steamers to and from Bombay, which under existing arrangements would be required to maintain a weekly mail communication with India by that route. Earl de Grey, in accordance with the wishes of the Government of India, requests that the subject may again be brought by Lord Stanley of Alderley to the early consideration of the Lords of the Treasury, and that their Lordships may be moved to consent to such a re-arrangement of the postal service with India as may lead to a removal of existing anomalies, and provide for the desired changes and extensions in the service, on fair and equitable terms."

2539. Then, the views of the Secretary of State and the Indian Government, are that if the weekly mail to Bombay should entail any additional

additional loss to the two countries, India should bear not the whole, but her fair proportion of that loss?—Yes, certainly; at the same time the Government believe, with the Director General of the Post Office, that by a re-arrangement of the whole of the services the desired service might be carried on without loss.

2540. It has been put in evidence before the Committee in this way, that the Government of India desired to improve the postal communication, but were not very anxious to pay anything for it; that you would not admit to be a correct representation of the views of the Government of India?—No, certainly not; they would be willing to bear half the charge of any necessary increase of expense.

2541. How is it that the Indian Government came to the conclusion that it would be possible to have a weekly mail to Bombay without any addition to the present cost of the mail contracts?—They propose that the postal line between Galle, Madras and Calcutta should be entirely discontinued, and that the Government of India should be relieved from any share of the expense of maintaining the line as far as Galle.

2542. With reference to the China mails, what is their view?—That they should be relieved from all charge on account of the mails between England and China.

2543. *Chairman.*] That is to say, that they will depend entirely in India upon local means of communication with China?—They seem to be prepared to make their own arrangements for the correspondence between India and China.

2544. If the Government of India is willing to pay its share of any necessary increase of expense in perfecting the communication between this country and India, the question then resolves itself into an unwillingness on the part of the Home Government to pay the difference that is left?—That seems to be the state of the case.

2545. *Mr. Stansfeld.*] As a matter of fact, the Secretary of State for India has acquiesced, has he not, in the principle of the existing arrangements by which the revenues of India sustain half the loss upon the China mail?—The Government of India have never voluntarily agreed to that principle.

2546. They submitted to the decision of the Treasury?—When the principle was first laid down by the Treasury in 1854 the Court of Directors remonstrated against it.

2547. We have had that remonstrance in evidence already, have we not?—No; the remonstrance has not been put in.

2548. Have you got it here?—Yes.

2549. Will you put in?—Yes (*delivering in the same*).

2550. Did those representations produce any effect?—They produced no effect at the time, and they have been renewed since; but the renewed remonstrance led to no alteration of the principle. The remonstrance made at that time led to the arrangement by which a portion of the expense of the mails is defrayed by the Australian Colo-

nies now; but the principle of the arrangement as regards China remains unaltered.

2551. With reference to the increase in the rates of postage, which has been proposed by the Post Office, has that subject been reconsidered at all by the Secretary of State?—No; it was stated in this letter to the Post Office, that that was considered to have been finally settled by the decision of the Lords of the Treasury in December last, in which the Treasury intimated that they should not press it against the wish of the India Department.

2552. You have heard the evidence of Mr. Knight with reference to his three main heads of complaint, namely, the speed of the present mail service, the injurious effect of monopoly, and the necessity of competition and certain new arrangements which he suggests; do you desire to offer any remarks upon that evidence?—With regard to the speed of the steamers, the Government of Bombay have begged that in any new arrangements which may be made a higher speed than that provided for in the old contract, of 10 knots an hour, might be required.

2553. With regard to the supposed injurious effects of the monopoly of the Peninsular and Oriental Company upon passage-money and freight is the opinion of the Indian community a mature, within your personal knowledge?—I know nothing upon the point. The supposed monopoly of the company is believed to operate prejudicially, or to have done so hitherto, in the view of the people in India, as preventing the establishment of an additional mail service.

2554. Generally speaking, are you prepared to agree with the views expressed by Mr. Knight, as to the advisability of alternate fortnightly services starting from Bombay?—I think that, as regards the postal service, it is not of much consequence by whom the service is performed. It is desirable that in inviting tenders for the new services, the thing should be so arranged as to allow independent companies to come in for portions of the service.

2555. And it will appear, will it not, from the documents which you have put in, that there is a great desire on the part of the Indian Government, as well as of the Indian public, that there should be a competition of that nature?—The Government of India are quite prepared to make use of the services of other companies, and they desire to have an opportunity of making arrangements with them.

2556. The view of the Indian Post Office appears, does it not, from the correspondence, to be strongly in favour of some new and distinct contract for carrying the mails?—Yes; I think so.

2557. *Mr. Ayrton.*] Are you aware that the Postmaster General entered into a contract on the 27th of February, 1866, with the Peninsular and Oriental Company?—I am not aware that it has been communicated to the India Office.

2558. The India Office was not consulted upon that contract?—I am not aware that it was.

*E. D.
Bourdillon,
Esq.
—
8 May 1866.*

COLONEL RICHARD STRACHEY, Examined.

2559. *Chairman.*] You were Secretary of the Public Works Department in India for some time, were you not?—I was for the last three years that I was in India. I came back about a year ago.

2560. During the time that you were in India, 043.

was your attention called at all to the working of the telegraphic system?—The telegraph is not under the Public Works Department, and therefore I have, so to speak, no specific knowledge of the detailed working of it.

2561. Nor any official responsibility connected with

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with it?—No official responsibility of any description; but from my general connection with, and my position as Secretary to, the Government of India, I understand the general system under which the telegraph was worked; and of course everybody has to deal with the telegraph in a practical way by using it, and one hears complaints, sees things, and forms opinions upon them.

2562. Are you prepared to give any opinion to the Committee as to the general results of the working of this Government system of telegraphs?—To begin with, I think that I may say that the deficiencies in the Government telegraph system are perfectly notorious, and that there is no dispute about that. It is a matter of fact that messages throughout India have been very greatly delayed, and have been very badly transmitted. At the same time, it should be equally admitted, on the other hand, that there have been great difficulties to contend with. But, irrespective of the causes on either side, whether bad management or inefficient administration, or the real difficulties of the case, the fact of the deficiencies cannot be questioned.

2563. Is it your opinion that the causes of this want of good conduct, so to speak, of the telegraphic system, are to be found in imperfectly constructed lines and inefficient establishments?—No doubt, on the face of it, that is the ostensible cause. The immediate cause is that the lines were originally ill-constructed, and that a great deal more work has been required of them, in the gradual development of the system which has taken place, than they were capable of getting through; and the same remark equally applies to the establishments.

2564. When you speak of the lines as being ill-constructed, are they to be considered as ill-constructed with reference to the state of science at the time when they were put up?—I should think so. It is my opinion that this was deliberately done; not accidentally, not from ignorance, but intentionally, and with this view, that the dominant idea in starting the telegraph in India was to get it constructed cheaply. The idea on the part of the people who had the management of it was, that the way to start it cheaply was to put up a thick iron wire on the top of a plain wooden post, without any insulations, and so to get it constructed at the cheapest possible rate; and having got the cheapest possible line, to get the cheapest possible establishment to work it, which they accordingly did. The salaries, no doubt, have been quite inadequate to secure what one may call properly efficient and qualified signallers and superior establishment. And I may say that this fact, as regards the insufficient salaries and the unsatisfactory position of the establishments, has practically been entirely admitted by the Government. Within the last six months, or about that time, shortly after the appointment of Colonel Robinson, who is the present Director General of the Telegraph in India, the whole system has been reorganised. On a report of his, considerable modifications were made, and the salaries were very sensibly increased; and no doubt the whole thing has been put on a much better footing. His proposals were virtually accepted by the Government, and the system, no doubt, has been sensibly improved.

2565. That system involves, I presume, the establishment of the telegraphic apparatus; that is to say, posts, wires, insulators, and all things

of that kind, upon a footing equal to the science of the present day?—There is no doubt that the intention of the Government is to do everything that is necessary to get a thoroughly efficient system of lines. Naturally, inasmuch as they have lines now, many of which were constructed ill, and in the cheapest way possible, that is to say without insulators, and to a great extent on bad posts, the reconstruction of those lines must be a question of time; but I presume that there is no doubt of the general desire of the Government to put things upon a proper and an efficient footing.

2566. Are you aware whether messages are forwarded upon the Government lines in any other than the English language?—They are exclusively in the English language.

2567. Then, of course, all the signallers must be practically acquainted with the English language?—Yes, they are to a certain extent.

2568. Does not that, of necessity, to some extent, limit the field of supply of signallers?—It does, there is no doubt.

2569. It was stated by a witness who had been employed in the Government telegraphic service in Bengal, that the signallers were almost entirely half-castes or Eurasians; and that no native Hindoos or Mussulmen were employed; can you assign any reason for that?—The signallers to a very great extent are half-castes; there is no question that, comparatively speaking, a small number of them only are natives of the country. I have a sort of recollection, now that you mention the thing, that I have heard that on Sir William O'Shaughnessy's original starting of the telegraph in India, he did accept the exclusion of natives as a general principle, but with the intention of getting the signallers to live together under one roof, so that they should be more accessible and amenable to discipline, and that they should be more readily kept on the spot to work the telegraph. Their prejudices of caste would have prevented most natives from living in the telegraph offices. I will not say that this really is the fact, but it is my impression that such was the case. I cannot conceive that the Government of India would, for an instant, have listened to any proposal to exclude natives of India, as such.

2570. You do not think that that exclusion of natives of India arose from any want of confidence in their trustworthiness and fidelity?—I do not in the least believe it; I do not think that such an idea would ever be conceived by the Government or accepted; it appears to me to be repugnant to common sense, and it is a sort of thing that nobody would listen to.

2571. Were you not consulting engineer to the Government of India, in the railway department?—I have been so.

2572. During that time had you any cognizance of the telegraph system, as it is worked on the East India Railway?—Not in detail; I know that the telegraph existed, and it was worked under certain restrictions. The law of India places the entire construction and the working of telegraphs in the hands of the Government exclusively, and no person, or company, can work a telegraph in India, excepting with the permission of the Government. That permission has been accorded to all the railway companies; and the railway companies, accordingly, do transmit messages for the public at rates which are identical with the rates of the Government, but still under certain restrictions.

2573. Are

2573. Are we to understand you to say that the law requires it?—Yes.

2574. Is there an enactment of the Government of India to that effect?—Yes; there is an Act of the Legislative Council of India, which gives the Government the exclusive powers to which I have referred, and lays down pains and penalties for various offences in connection with the working of telegraphs.

2575. Was it during the time that you were consulting engineer to the Government of India, in the railway department, that the Government had under its consideration the proposal which was sent to the Secretary of State here for the formation of a company which should work the telegraph wires upon the railways?—It came before the Government of India, when I was secretary to the Public Works Department. The Public Works Department manages all railway business, and that proposed did come before the Government in my time.

2576. It appears from the correspondence, that the matter having been remitted by the Secretary of State to the consideration of the Indian Government, and that the Secretary of State, upon the receipt of the reply of the Indian Government, declined to sanction the proposed arrangement?—So I have heard.

2577. The Secretary of State was asked by one of the railway companies to state his reasons for having done so, and he declined to furnish the railway company with any reason; from the circumstance of your having been at that time consulting engineer to the Government, are you aware of what the reason was?—I was not consulting engineer at the time, but secretary in the Public Works Department. I have not seen the papers for some little time, and therefore I may blunder in the details, but my impression is, that the Secretary of State stated the facts to the Government of India, and asked for a general opinion as to the merits of the proposal, but not whether they advised that the arrangement should be carried out. The question was put in such a way as virtually to preclude the Government of India from giving an opinion as to whether the proposal was in itself expedient or not. Whether that was the intention of the Secretary of State in sending it out to India, I cannot say, but that was the view that we took of it in India.

2578. In the papers which have been laid before the Committee, there is a letter addressed by the Government of India, dated, "Public Works Department, Simla, 18th June 1864," to the Secretary of State for India, in which the question is discussed, with regard to the working of the arrangements in the case of the East India Railway Company; are you aware of that letter?—Yes; that letter was drafted by me.

2579. Is it a fact that, so far as your information goes, there was no disinclination on the part of the Government of India to allow the telegraph company to work the wires upon the railways, or that an objection was made by them to the specific terms which had been submitted for their consideration?—A reference to the letter will show that the objections of the Government of India were to the specific terms, and that the question of general policy was not discussed. I have no reason to think that, if the specific terms had been satisfactory, any objection would have been raised on general grounds to the establishment of a company to work a tele-

graph as proposed. I know that this question did arise in some form, but, as I said, the telegraph business was not in my department, and therefore I cannot speak positively; but I have heard, and have every reason to believe, that the Government did express an opinion that they would have no objection whatever to the formation of a private company to transmit commercial messages between Calcutta and Bombay. Some complaint was made that the Government-lines did not transmit messages for the public satisfactorily; and the Government gave an opinion in some shape that they would be perfectly open to allow a private company to come in and do the business if they pleased.

2580. As far as you are aware, is there any unwillingness on the part of the Government of India to approve of this plan of working by means of a company, on the ground of the interference of the company with the receipts upon the Government system of telegraphs?—If the answer to that question must be, yes or no, I should say no, in a general way; but the answer must be given with reference to some specific line. This is my apprehension of the facts of the case: that on those lines where the business on the whole is so large that the Government business and the business of the community cannot be carried on satisfactorily together, the Government would not object to their system being so far supplemented by lines erected and worked by a private company, but that, where the Government lines were capable of doing all the private business of the country in a reasonable and satisfactory way, the Government would object to a private company coming in, because, where the Government business is limited in its amount, it is a great advantage to the Government to get the private business to assist in paying for the working of the lines.

2581. That is to say, the Government would not like the competition between themselves and a private company?—Not on those lines where a competition would virtually interfere with their getting back some of the cost of working the line which otherwise they must maintain.

2582. Do you think that there is any feeling of a political nature in the mind of the Government of India; do you think that they are unwilling to part with the power which the sole authority over the telegraph system places in their hands from the same motives probably as in all the Continental States of Europe the telegraphs are in the hands of the Governments?—I should say yes decidedly, and I think that the Government would not be in the least disposed to repeal their Telegraph Act, and that any company which was started to work in India would have to work under that Act, and with a license from the Government.

2583. You think that it may not have been the knowledge of that being the real reason why the proposition is not entertained in India that led Sir Charles Wood to send a despatch, assigning his reasons for not entertaining the proposal?—No, I do not believe that at all; I can say positively, in this case, that there was no such feeling in India.

2584. Do you think that, as a matter simply of administration, the Government are of opinion that as they have the Post Office entirely in their hands, so it might be desirable to have the telegraph entirely at their command?—What I should say, as regards that, is something of this

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sort. I look upon it that the telegraph is a political necessity for the Government; that virtually the Government must maintain a large portion of the telegraphs in India, for this reason, that no private company could work them with advantage. I mean, that a private company could not work them for the Government with advantage. For instance, in the case of the telegraph to Peshawur there would, one may say, be no private messages at all; and if a private company were to attempt to work a line for the Government they would charge the Government a great deal more than the Government would have to pay if the Government managed it themselves, because a private company would not merely charge the actual working expenses, but they would charge a handsome amount of profit. The same remark applies to a very large proportion of the lines in India; and so far, therefore, I consider that the Government is of necessity, and will be for an indefinite period of time, forced to keep up a large telegraph establishment of its own.

2585. Speaking for yourself, as an officer of very large experience in India, are you of opinion that it would not be desirable to allow the railway companies the power to lease to a company the power of using the wires upon their lines, or to allow such a company the power of taking the whole of the telegraph service over from the railway companies, managing their private business for them, that is to say, transmitting all their service messages, do you think that would be a desirable or an undesirable thing in the public interest?—I am not prepared to say that I see any particular objection to it.

2586. It appears from the accounts before the Committee, which come down to the end of the year 1864, that the whole of the capital expended in the construction of the Government telegraph lines in India, after taking credit for receipts by the sale of unserviceable stores and so forth, amounts to the large sum, in round numbers, of 1,150,000 £.; and in like manner the capital expended by railway companies in the construction of their lines, amounts to about 411,924 £.; it appears also, that the annual charge of the working and maintenance of those lines, upon the average of the last two years in the series, was 268,000 £. on the Government telegraph lines, and 83,000 £. upon the railway telegraph lines; that the whole of the receipts on the Government lines were 165,000 £., and on the railway lines 21,000 £., and that there is consequently an average loss of 51,000 £. per annum upon the Government lines, and 30,000 £. upon the railway lines, not taking into account the interest upon capital expended; does it not appear to you to be a wasteful expenditure, that those two systems of communication should be kept up, the one as it were against the other, without any attempt being made to bring them into harmonious working, so as to save expense and to procure the greatest amount of accommodation and service to the public?—My first remark, as regards that question, would be this, that I am not at all satisfied that the railway and Government telegraph lines are working in any sense in opposition to one another, and if that be an admitted fact, then it seems to me that the whole case falls to the ground.

2587. Taking the case of the communications between Calcutta and Delhi, I presume that there is a Government line between those two cities; we know that there are four wires along the railways, and it is manifest that those two

systems are competing one with the other?—How far they are competing will depend on circumstances: supposing we had two wires, one belonging to the East India Railway Company, and one belonging to the Government, if each of those wires is only doing one-third of the work that it can do, if you maintain them both and work them both, I admit that there is competition, and foolish competition; but, supposing that both of those wires are doing as much as they can reasonably be expected to do, I do not see that there is any competition.

2587*. Do you think that that supposition can hold good when it appears that there is a considerable loss upon both?—I do, for I think that any amount of loss is perfectly compatible with exceeding bad management.

2588. You have suggested that there has been bad management upon the Government lines; do you think that there is any bad management in the Telegraph department of the Railway Companies?—I have no reason in particular to suppose so; I believe that the railway telegraph lines have been well-constructed, and there is every reason to suppose that they are properly worked; I know no reason for supposing that they are not properly worked.

2589. In like manner, on the completion of the system of railways between Bombay and Calcutta, the same thing will occur; there will be a Government line of telegraph, and there will be a system belonging to the East Indian and the Great Indian Peninsular Railway Companies; would it not be a very great saving if the Government line between those two great capitals was withdrawn, and the business left to the railway companies to carry on, or a company working through them?—I think it quite possible that it might be.

2590. In fact, wherever there is a railway, in that case it might be desirable to withdraw the Government service, provided the Government have sufficient guarantees?—Yes; that is to say, whenever there is in the nature of things a telegraph line established which must be maintained, the Government retaining its power to put an embargo upon the line if, for political purposes, it is necessary. In such a case, I am not prepared to say that there would be any particular reason why such a line should not be left in the hands of a private company, and, as you say, the Government service entirely withdrawn from it.

2591. The Government line from Bombay to Calcutta follows, I suppose, no particular line through the country; it takes the shortest way where it can; it does not follow the course of the high roads, but it goes over the hills and mountains, and through jungles, in a tolerably direct course between any two points which it does join together?—No, I think not.

2592. Can you tell us how it is laid out?—There are several lines which communicate between Calcutta and Bombay; you can telegraph in various directions, and the fact is, that this practically occurs.

2593. I did not mean to say that the line was direct, as between Bombay and Calcutta, but as between any two towns that it takes in its course, it pursues a direct course?—In a general way the telegraph follows the main roads.

2594. In the case of the railway, the telegraph follows the course of the railway?—Quite so.

2595. Does not that imply very great facilities for the purpose of inspection, and still greater facilities

facilities for the purposes of repair, as compared with the lines through the ordinary country?—There is no question that a telegraph line constructed along a line of railway is infinitely better under control in every respect, and can be worked much more cheaply.

2596. And therefore much more economically as compared with the Government lines?—Quite so.

2597. Does not that afford an additional reason why, in the case which I have before stated of towns being connected by a railway, the Government system should be withdrawn in favour of the lines upon the railroads?—It is a reason, but I am not prepared to say that it would be a conclusive reason. It is a reason which can be given, or one of the reasons which can be given, in favour of the Government dropping the working of their lines under such circumstances. But then something may be said on the other side. Before accepting any reason or reasons conclusive, it is necessary to balance all the reasons on one side, and all the reasons on the other.

2598. Limiting it to a simple comparison of the two systems of communication between towns united by a railway, and upon which the railway company have telegraphic communication, would you not in that case consider it nearly a conclusive reason?—I should say, considering the sort of position in which the principal railways in India are placed with regard to the Government, and that virtually the Government is interested in the profits of the railway, there is no particular objection to that sort of arrangement being carried out as regards the railway lines.

2599. The Government has a direct interest, have they not, in utilising the expenditure upon the railways?—Yes; I mean that the Government has a direct pecuniary interest in the thoroughly economical working of the railway in every department, and therefore that the financial question, as between the Government maintaining or abandoning a particular portion of a telegraph line, does not so much apply there, because if it loses in one direction, it will certainly gain in another; if the Government gave up its business, the Railway Telegraph Company would get it. But as regards other lines, it appears to me that this is questionable; the Government must look upon its telegraph business, so long as it maintains it, as a whole; you require a certain superior agency to direct the whole, and you will have a certain amount of fixed charge, whatever lines you work; so that in proportion as the Government retains in its own hands the lucrative lines, which will be lines which are worked for commercial purposes, it will in reality reduce the strain upon the finances, which is brought about by those lines which are unproductive.

2600. It appears that at the end of the year 1864 there were of Government telegraph lines in India 11,736 miles; does that mean miles of wire or miles of line?—Generally speaking, the Government line is a single wire, in some few cases there would be two or even more wires. I should suppose that the length named will be the aggregate of all the working lines; if you draw on the map a series of lines to show where there is telegraphic communication the aggregate length of these lines, irrespective of whether they have one or two wires, will be the number of miles stated.

2601. *Chairman.*] Looking at the great extent 0.43.

of many of the districts from Bombay to Calcutta, and from Madras to Lahore, and so forth, do you think that 11,736 miles of telegraph implies a very great amount of telegraphic communication within the country?—That is rather a difficult question to answer, involving as it does the adoption of some standard by which to test what is great in amount.

2602. Do you think that although 11,736 miles have been constructed, yet there is room for a considerable increase, as far as the public wants are concerned?—Yes, I entirely concur in that view.

2603. If you were to withdraw the Government wires from the line between Calcutta and Delhi, and Calcutta and Bombay, you would release about 2,000 or 3,000 miles of wire on the spot which would be serviceable for the purpose of constructing such new lines as might be required?—That is perfectly true; but, at the same time you will release so much income which would go out of the pockets of the Government into the pockets of the East Indian and great Indian Peninsula Companies.

2604. In which the Government have a direct interest, inasmuch as they guarantee 5 per cent. upon their expenditure, and, subject to their approval, one-half of the surplus over 5 per cent. upon the railway making it?—Precisely so.

2605. *Sir Charles Bright.*] I think your argument is, that where Government telegraphs are capable of doing the private business, there, and there only, the Government would object to any competition?—I would not say that; but it is rather this, that the Government must view their system as a whole; that if, by cutting away those portions of the system which private companies would be ready to work, they virtually have the whole burthen of the working of the telegraphs in the unremunerative parts of the country thrown upon their hands, then, I think, the Government would be perfectly justified in declining to give up the remunerative part and simply have the unremunerative part forced upon them.

2606. I was not speaking of giving up, I was speaking of competition only; I understood you to say, that where the Government are capable of doing the private business, in your opinion, they ought in such cases to object to any competition?—Quite so.

2607. Is it your opinion that between Bombay and Kurrachee, between Bombay and Calcutta, and between Bombay and Madras, the Government are at present capable of doing the private telegraphic business efficiently?—I think they are perfectly capable of doing it if they are pleased to do so. That they have not pleased to do so is a totally different affair. The Government, for reasons which might be explained, have constructed their telegraph lines, and have worked them on a very inefficient basis; and so long as the Government persists in doing that, I think that everybody certainly has a perfect right to say that they should not be allowed to continue to work the telegraph lines; but to say that there is any abstract reason why the Government should not construct and work telegraph lines efficiently is another affair, and my own belief is, that they are just as capable of working telegraph lines in India well, and in fact more capable, than any private company conducted in England.

2608. *Mr. Stansfeld.*] You stated that there S had

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had been great changes in the internal management of the telegraph, did that occur about the date of the appointment of Colonel Robinson?—What I said was that great changes had been made in the organisation of the department; but naturally it will take some little time before this will develop itself in the improved working of the lines.

2609. A considerable reconstruction of the lines is going on, is there not?—Yes, and it has been going on for some years past.

2610. But, especially of late, has it been going on within your knowledge?—Yes; and perhaps the best way of explaining the whole truth as regards that is just to explain how the telegraph came into existence. It was started comparatively on a small scale, and the original lines were single wires, put up, as everybody knows, on posts without any insulators. So long as the quantity of work to be done was very small it answered the purpose very well, but as soon as business began to press it became necessary to transmit the messages much quicker, and a better class of signallers, and lines better insulated, were found to be requisites; in proportion as the business has increased, the difficulties and the inefficiency of the Government telegraph system have become more apparent. These defects, in my opinion, at bottom spring from the want of proper system in the Government administration. Practically speaking, up to the present time, this has kept the progress of the department altogether in arrear. If a pressure comes upon the Indian Telegraph, the public and everybody concerned, and when I say the public I mean everybody who has used the telegraph, whether it has been a government officer or anybody else, finds its working inefficient and unsatisfactory. At last, after various struggles, there has been this amount of reform made of which I speak; but still, I confess to thinking that the system under which the Government administration is carried on is radically bad and wrong, and that the working of the telegraph is likely to continue to be inefficient until a change of system is adopted.

2611. You do not think now that it is simply a question of the time necessary to effect alterations in the organization which have been determined upon; you think that there are defects in the organization which has been recently agreed to?—I think that in a Government institution, such as the Indian Telegraph, the efficiency of its operations will essentially depend upon the manner in which the Government authority is exercised; and I think that the present system is in some essential respects defective, and that, although a certain amount of alteration and improvement has been made now, precisely the same causes which have led to the Government telegraph lines falling into arrear in the supply of the wants of the country in past years, will continue to act in the future, unless the defects which give rise to them are removed.

2612. What are those causes which have not been removed?—Those causes are, as it seems to me, the wrong system in the superior Government administration, which could be put into half-a-dozen words by saying, that there is no specific responsibility in any member of the Government to see that this sort of business is properly carried out. To this I attribute the whole of those defects, and I believe that this want of specific responsibility is an infinitely more important thing than the want of insulators,

or the want of signallers paid 40 rupees a month instead of 20.

2613. Is there not the responsibility of the Director General of Telegraphs?—But I go higher than that. The executive machinery of the department has been inefficient, but I will suppose that all that is put right, and that you have a thoroughly competent executive staff to manage the department. Still there will be no proper security for real efficiency, if it be true that the way in which the Government control is exercised is defective; when you come actually to get to the bottom of the thing all hinges on this. When anything is wanted, a report is made to the Government of India, and the whole matter is in the hands of the Government of India.

2614. Perhaps the best question to put to you, would be what change in the organisation would you recommend?—I would say that I look upon the telegraph administration in India as virtually a part of the Public Works administration. The telegraph is in reality a public work, and it requires the same sort of knowledge, the same sort of organization, and the same sort of system, to work it, as any other public work, such as a railway, or a road, or a canal, or what not. For some reasons, which it is unnecessary to go into, the Telegraph Department is not under the Public Works Department in India, although it is in the India Office in England. Practically speaking, both the Public Works Department and the Telegraph Department have been left entirely in the hands of members of the Government who have no specific knowledge of those subjects, and precisely the same defects have arisen in the Telegraph Department, as have arisen in the Public Works Department. The defects in the Telegraph Department have been somewhat more flagrant, perhaps, than those that have arisen in the Public Works Department, but still they are quite of the same character. The Public Works Department has been able to correct its defects somewhat better and earlier, because the officers who compose its establishments have, as a whole, been possessed of higher professional qualifications, have been more numerous, and a better class of men. Therefore we, in the Public Works Department, have been better able to force upon the Government, and I say it deliberately, to force upon the Government many important improvements.

2615. If I get at the real pith of your idea, it would be this, that the Telegraph Department should be made a sub-department of the Public Works, and that you should increase the responsibility and discretion of the head of the Public Works Department?—I would put it rather in this way. Within the last 10 years there has been a great change in the way in which the Government of India has been managed; the business has vastly increased in quantity when compared to what it was before 10 years ago; when Lord Dalhousie was Governor General, he used virtually to manage the whole business himself, and, in my opinion, almost every great improvement which has been made in these last 10 years has originated from something which Lord Dalhousie did; the business since then has so largely increased, that it has become absolutely impossible for any single man to cope with it; Lord Dalhousie himself saw that this was coming, and, to my knowledge, he said that he did not know how his successor would ever get through the

the work. The result has been that during the last few years the business of the different branches of the Government has been much more broken up, and separated, and placed in the hands of individual members of the Council, than was formerly the custom. The current business of the Government is now distributed among the members of the Governor General's Council, and only the most important matters become subjects of common consideration. In some of the departments members of the Council are appointed by the Secretary of State, who are specifically and personally responsible for the conduct of those branches of the public business. The business of the Military Department is in the hands of a selected military officer. The business of the Financial Department is in the hands of a gentleman specially selected on account of his capabilities and qualifications in that respect; and the same is the case with regard to the Legislative business of the Government. And now the step which in my opinion should be taken, is to deal in this manner with the large class of interests which are called Public Works, and to put them in the hands of a member of the Council, who should be selected as the best man that could be got, and made specially responsible that the business of this Department of the Government of India should be properly carried out.

2616. Through which member of the Council do the papers of the Public Works Department pass now?—It is a matter of accident. I can tell you my own experience. I became Secretary in the Public Works Department just at the time that Lord Elgin became Governor General. I do not wish in what I am saying to pass any reflections upon anybody. I am merely saying what is my honest belief, and what I understand to be the actual facts of the case. When I first became Secretary to the Public Works Department, Lord

Elgin took the papers himself, and dispatched the current Public Works business as long as he remained at Calcutta, which was for one year. Then he went to Simla, on which the business was divided between himself and another member of the Council, Sir Charles Trevelyan. Lord Elgin, with whom I went, took one half of the duty, and Sir Charles Trevelyan, the member of Council in Calcutta, took another. There was very little connection or sympathy, and hardly any communication between them; each settled his own share of the Public Works business. On Lord Elgin's death the Government was again reunited at Calcutta; Sir Charles Trevelyan then gave up the Public Works business, and it went into the hands of another member of the Council, who kept charge of the department for three months. Then a change in the constitution of the Council occurred, and it was put into the hands of another gentleman, who kept it for six months; he only had an acting or temporary appointment in the Council, and at the end of six months he left it, and then the Public Works business came back again to the member of the Council who before had charge of it, and he kept it again for three months. Then there was another change, and the Public Works business once more went out of his hands into those of somebody else. Consequently, I say, there is no specific or fixed responsibility, at least nothing which deserves the name of specific responsibility for the management of this sort of business.

2617. There is no continuity?—No; there is no continuity. The necessary result is, that the business is transacted as a routine business, and the only strength in the Public Works Department is the secretary. I mean that he is the only man who gives continuity of principle to the administration.

Colonel.
R. Strachey.
8 May 1866.

Tuesday, 15th May 1866.

MEMBERS PRESENT:

Mr. Ayrton.
Sir Charles Bright.
Mr. Brooks.
Mr. Crawford.
Mr. Marsh.
Mr. Moffat.

Sir Henry Rawlinson.
Admiral Seymour.
Mr. Stansfeld.
Mr. Turner.
Mr. Weguelin.

ROBERT WIGRAM CRAWFORD, ESQ., IN THE CHAIR.

Mr. JOHN DORNING, called; and Examined.

Mr.
J. Dorning.
15 May
1866.

2618. *Chairman.*] YOU are an Accountant, I believe, in the office of the East Indian Railway Company?—Yes.

2619. Have you prepared a summary of the disbursements and receipts on account of the telegraphs in India from the papers which have been laid before this Committee?—Yes (*delivering in the same*).

2620. What is the whole amount expended by the Government in this country and in India in the construction of their telegraph system?—£. 1,146,861 14 s. 3 d.

2621. What is the whole amount expended in a similar manner by the railway companies?—£. 411,924 12 s. 8 d., the two together making the sum of 1,558,786 l. 6 s. 11 d.

2622. What was the amount received last

year by the Government for the conveyance of messages?—On account of private messages 77,644 l. 10 s. 9 d., and of service messages 12,457 l. 15 s.

2623. And how much was received by the railway companies?—On account of private messages only (service messages not being charged), 13,489 l. 6 s. 3 d.

2624. What was the amount expended in the maintenance and the working of the Government lines?—£. 933,463 12 s. 8 d.

2625. And by the railway companies; how much?—£. 41,888 18 s. 5 d.

2626. Have you any observation to make to the Committee upon those returns?—No; I have appended notes in all cases where any explanation appeared to be required.

Colonel RICHARD STRACHEY; further Examined.

Colonel
R. Strachey.
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2627. Mr. *Stansfeld.*] DID you in your former examination state to the Committee how you obtained your knowledge of the working of the telegraph in India, and up to what time it dates?—I stated that as my experience in India had been in the Public Works Department, and as the Public Works Department has not the charge of the telegraph, therefore, I did not affect to have any specific knowledge of the working of the Telegraph Department.

2628. At what time did you leave India?—I left India at the end of March 1865.

2629. When the Committee last met, you gave your notion of some of the causes of the unsatisfactory management of the telegraphs in India, based upon the construction of the Public Department, upon the non-representation ultimately in the Council of the Public Works, including the telegraphs, by some competent person; there is another remedy, if one may so call it, which would be the substitution of the action of private companies instead of Governmental action; you entertain opinions, I think, upon that question?—Yes, I do. As regards the action of private companies in matters of this sort, it seems to me that it is altogether wrong to assume that because, in any particular portion of the administration, the action of the Government becomes unsatisfactory, therefore the proper remedy is to

introduce a private company to carry out the duty. There is no doubt, however, that there is a sort of vague impression that this in many cases is the proper way to dispose of difficulties; and it is assumed generally that Government is incapable of managing that sort of business, which commonly is carried out by a private company. This seems to me an altogether erroneous idea, and an erroneous way of looking at the general question. What I should say is, that the proper limit for the action of Government in administrative matters is that the Government, which is in reality the executive of the State as a whole, should merely concern itself with those matters which are of general interest, as distinguished from those which are of individual or local interest; and that when personal and local interests are found to be no more than portions or elements of what in fact is some large and general interest, it becomes not only the right but the duty of the central administrative body, the Government, to intervene in the management of the interest, whatever it may be. Therefore, in considering whether the proper remedy for the defective management of such a matter as the telegraph in India is intrusting it to a private company, or a system of private companies, I should first ask, is this a thing which in itself should be, or may be, properly carried out by the Government or not?

not? My own impression, as regards the telegraphs in India, is that the utility of them is so general and so widely diffused that they constitute what is essentially a public interest, and an interest which is better in the hands of the Government than of a private company. Virtually, the spring of action of a private company is private gain; the spring of action, on the part of the Government, is public spirit, or the desire to serve the public convenience; and, where the object in view is essentially and directly the public convenience, I think that the end will be better attained by Government action than by the action of private persons. Of course, in saying this I assume that the Government will take those steps which are best suited for carrying out the object. Where a Government, from whatever cause, virtually cuts itself off from adopting that which is obviously the proper course in managing such business, its position becomes untenable, and then undoubtedly the proper thing is to get the action of such a body as will, under those circumstances, be the best for carrying out the object.

2630. You would liken the telegraph system to the post office system, would you not very much, as regards the Government management?—Yes, to a great extent. As to the detailed system of management, of course that is a different thing; but, as to the scope of the duties to be performed, it seems to me that just in the same way as the post office is intended for the despatch and delivery of letters for every individual of the community, so a telegraph system, on a comprehensive basis, would be intended for the receipt, the despatch, and the delivery of telegraph messages for the whole community, in a manner precisely analogous. I really see no reason at all why the management of the one is at all more incompatible with the proper functions of the Government than the management of the other.

2631. Do you suppose that the formation of a private company to undertake a telegraph system in India would be possible, first, without a guarantee, and, secondly, without a considerable amount of Government interference?—I entirely disbelieve it; I feel perfectly satisfied from the whole course of my experience, which has been tolerably long in India, that so far from there being any tendency to the development of private companies working without Government assistance, it is exactly the reverse; and every day that we live, it becomes more difficult to accomplish that. Formerly there was some sort of an attempt made to get up companies for objects such as these, without Government assistance, but now nobody will even look at them on such a basis. Nobody knows better than the Honourable Member himself the sort of position in which the construction of great public works in India now stands, and that the great difficulty is to find the money. On the one hand, the Government finds a difficulty in providing the money; and, on the other hand, it is acknowledged that it is not merely a difficulty, but an impossibility to get private individuals to subscribe their money on the chance of obtaining sufficiently remunerative returns, from objects to be carried out under a paid agency at the other end of the world.

2632. Therefore the operation and management of such a company would still be very much dependent upon the executive management on the part of the Government?—I am entirely of that opinion; I think that, to begin with all

the preliminary negotiations which would be necessary to determine the precise amount of the financial assistance which the Government was to give to the company, would require special care, special knowledge, and special talent, on the part of the Government, in arranging the matter properly. I can say that, in every single case which has arisen in which any company has come forward proposing to do anything in the shape of a public work in India, there has always been the greatest difficulty in arriving at a conclusion on these matters; and I feel quite satisfied that at the bottom of that difficulty has been what I have spoken of already, namely, the want of any tangible and specific head, the want of a point to which the promoters of such schemes can go to get a practical and definite expression of what is really the intention and the policy of the Government.

2633. With regard to actual executive local management, would a company have any, and what, advantages over the Government?—I should say that, so far from having advantages, they would have disadvantages. It seems to me that a company established in England to work such an affair as a telegraph in India must obviously depend for everything that it did precisely on the same class of agents that the Government would depend upon; that is to say, paid agents. The paid agents of a company are in no respect taken from a better class of men than the paid agents of the Government, and in many respects the Government has greater facilities in getting able and capable men for its work than a company. There are many advantages on the side of the Government, such as permanence of service, pensions, and various other things. Further, as regards the supervision of the administration, provided of course that there be a satisfactory and efficient Government system, the check upon the agency would be much more close if maintained by the Government in India than if maintained by a Board of Directors from England.

2634. And you yourself see no practical impossibility in arrangements which should result in a perfectly efficient Government management?—What I should say is, that I see no reason whatever for supposing that, under a proper system, the Government management should be anything else than better than the management of a private company. I am not one of those who think that the management of private companies is commonly very efficient. I think if we look to the actual facts of the management of the great companies which now exist in India for the carrying out of public works, that nobody would say that their management has been particularly brilliant. It has, considering the whole of the circumstances, been fair; for they have worked under very great difficulties, of which some of the greatest have arisen from the very conditions of their existence. On the whole, indeed, making due allowance for the position of these companies, and looking at the powers and capacities of human beings, as they are in fact, I daresay that the management has been as good as might have been expected from them.

2635. *Chairman.*] Does your objection go to the length of prohibiting a concurrent action on the part of the railway companies with the Government in the transmission of messages for the public?—Not at all. I do not wish to be misunderstood to the extent of saying that I am at

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all opposed to the action of private companies in India; I think that under many circumstances the action of private companies in these sort of matters would be exceedingly useful.

2636. Are the Committee to understand you to say that, reasoning from your experience in analogous cases, the capital could not be provided for any enterprise of this kind in India without the assistance of Government in the form of a subsidy or guarantee of some kind?—I think that it almost amounts to that; at least, I do not know of any way in which the Government assistance could be given which would induce capital to go to India except as a definite subsidy or a definite guarantee.

2637. You are not of opinion, I presume, that the capital for the purpose would be found in India?—No, it is notorious that it would not be.

2638. You are aware, are you not, that in the case of the Indian railways, not more than one or two per cent. of the whole capital has been found by the Indian public?—Yes, I am quite aware of that.

2639. You say that the public convenience which the Government recognises in all these things is superior in its operation to the private interest of individuals, or of any company, looking to gain as the result; is that your view?—Yes, I said something of that sort.

2640. Do not you think that private energy is likely to accomplish a great deal that a governmental department, which is restricted by forms and various other things, is not likely to accomplish?—My reply to that would be, that I do not see why individual personal energy should not exist and operate as well under a government as under a company.

2641. Is there any stronger motive than private interests for the accomplishment of such ends as the telegraph service implies?—Of course there is; and no doubt the motives of persons who originate a company to carry out any public object may be quite as public spirited as the motives of the members of a government who initiate a like object. I admit entirely that in the starting of any operation, whatever it be, public spirit may play an important part in the working of a company, but I exceedingly doubt whether those public spirited motives practically continue to animate any company, for any length of time, and I feel certain, that before long, they become very secondary in their power.

2642. If the motives are not public spirited they are private spirited, and would have as good an effect in promoting a good and efficient service, would they not?—To a certain extent I suppose it is true that the inducements of private interest will continue to stimulate a company to look after their own affairs, as completely as the operation of public spirit will stimulate the members of a Government to look after the affairs of the community. Practically, however, any such company will have a complete monopoly, and the check on their proceedings, derived from the fear of competition, will be quite absent, especially if they work under a Government guarantee in any shape. But I would also say, as regards this point, that I cannot admit or understand that there is any more reason why the Government, when it is once thoroughly awakened to the necessity of any particular course of action, should be suspected, either of intentionally or accidentally neglecting such interests as those which are involved in the construction and maintenance of a telegraph, any more than they should

be suspected of neglecting the administration of justice or the defence of the country. I can see absolutely no distinction between these cases, so far as concerns the security which the community has that the Government will properly perform its duty. In all matters of public interest, whatever their nature, it is what we call public spirit which induces the members of a Government to continue their action, and it can be their only motive.

2643. You rather set public spirit, in that sense, above the motive of private interest?—Where the object in view is essentially one in which the public as a whole is more strongly interested than the individuals, or any section of individuals, I think that what I have called public spirit is a motive better likely to produce good results than private interest.

2644. Supposing a company to be formed with a sufficient command of money, do you not think that that company would have a stronger motive in laying the money out to advantage in serving the public convenience to the utmost of its powers, as compared with the Government which is restricted by forms and by the necessity of going on every occasion to a higher authority for the sanction of expenditure, and so forth?—I do not think that the advantage which you refer to, arising from the greater freedom of action in a company, can be fairly claimed, and for this reason. You refer to the action of a company, which is independent, which is a self-constituted body, which, if it requires money, raises money itself, which spends money on its own authority, and is the final judge of all its own actions; while you virtually limit me by your comparison to a government which is debarred from raising money, and which is debarred from doing many of these sort of things which in the very nature of the case are done, and done as a matter of course, by a company. If you *de facto* cut off from a government the power (never mind how the power arises, or how that cutting off of the power arises) of raising needful money, and of spending it as it is required, I admit that a government, under those circumstances, is entirely unfit for such enterprises as those of which we are speaking. If in the nature of things a government is so constituted, and must be so constituted, that it will not act in the way you suppose the company will act, that is to say, will not allow money to be spent when it should be spent, then I admit that such a government is not fit to carry out these sort of works.

2645. Do you think that the analogy of the Post Office is an analogy good for the present discussion?—I merely mean that the Post Office is an analogy as regards the class of interest which a Government can properly and successfully manage, not as regards the system of administration, which is a totally different thing.

2646. Take, for instance, the delivery of messages from a telegraph office as compared with the delivery of letters by the post, which are sent out at certain stated intervals. The whole of the value of a message consists in its immediate delivery, in nine cases out of ten, in giving the receiver of the message the priority of intelligence; do you think that there would be that constant attention on the part of a Government department to the sending out of messages the moment they are received which you would find in the case of a private company?—I should say that there is quite as much reason for supposing that a Government department would do the whole

whole of the telegraph business as well, under proper management, as any private company. I appeal to the actual working of our Post Office here in England, to show the wonderful way in which a most exceedingly large variety of private interests is regarded and attended to by a Government management. The requirements of the Post Office service in respect to punctuality, promptitude, and good order, seem to me fully as great as, if not greater and more difficult to meet than, the like requirements of a telegraph service.

2647. Mr. Marsh.] How is it that these telegraphs in India do not repay the Government the expense which they laid out upon them; how is it that, if it is merely good management that is desired, they will not pay as well as they do in a thinly peopled country like Australia?—The reason why they have not repaid themselves is, that the charges that the Government have made have been a great deal too low; and one of the obvious defects of the working of the system has been, that the Government from time to time has not taken the necessary steps to see that the charges for messages were commensurate with the actual expenses of the working.

2648. Mr. Ayrton.] You mentioned that in the first establishment of telegraphs in India, they were laid down upon an economical system; are you aware whether the officer of the Government deliberately set himself against the experience of the telegraphy in Europe, and laid down the telegraph in the most unsatisfactory and insufficient manner?—I believe the fact rather was that when the telegraphs were first started in India, there was a general ignorance on the subject of how telegraph lines should be put up; Sir William O'Shaughnessy had his own ideas upon the subject, and his ideas were that the thing might be done very simply, and economically, and it was on that basis that the lines were actually carried out.

2649. Was not it the fact that he set up the general ignorance of himself and other people in India against the general knowledge which existed in England, and that in consequence of that the whole thing miscarried?—I am not in a position to say anything about that.

2650. Still it was set up in a manner in defiance of the scientific and intelligent opinion of England, and of Europe, was it not?—You can put it that way if you please.

2651. Practically it was so; it was not in accordance with the then existing scientific knowledge and experience of England and of Europe?—I will admit that Sir William O'Shaughnessy did not accept the authority of the scientific people in England.

2652. That is to say, he set up his own opinion, and the Government allowed him to do it; did not the Government also depart from the recognised lines of communication, in setting up their telegraphs, so that when the railways would be completed, instead of the telegraphs being on the lines of railway, the great highways of communication, they would be on different lines of communication?—I fancy that all that is to be said regarding that is, that the Government wanted the telegraph at once, and that it was quite certain that the railways would take many years to complete; and in some instances the railways were laid out in such a manner that it would not have been useful for Government purposes to have followed the lines of railway in laying out the telegraph lines. On the whole, I have no reason to suppose that the original telegraph lines

were laid out otherwise than was proper under the circumstances then existing.

2653. But still, at the time they were laid down, were not the general or main lines of railway communication, pretty well indicated and settled?—I cannot answer that question.

2654. Are you aware that the telegraphs in India are not laid by the side of the highways as in this country, but that they are laid off the highways, and in the jungle in many places?—In some places this occurs, in order to cut off angles; but certainly it is not the case as a rule.

2655. Do not you think that there is a great difference between a company undertaking a project for the purposes of profit, and a Government undertaking it without any view of profit, and that that difference of principle interferes very much with the general conduct of an undertaking; or do you consider that the Government undertakes a project like the telegraphs in India for the purposes of profit or loss, or with some idea or sense of public interest?—As far as I understand the meaning of the word Government, it is the executive body which looks after the interests of the State, or the community as a whole; and I see no reason why a Government shall not be able to conduct business connected with a system of telegraphs, as well as that which relates to any other public want or interest. The primary object of the Government, no doubt, in starting the telegraphs in India was their own political advantage; but of course they were aware that, if a telegraph system was established, private interests also would be benefited.

2656-7. Is not the difference between a company undertaking a project of that sort and the Government, that the company undertakes it with a reference to the profit or loss of that particular project, whereas the Government have no such object in view?—Quite so; that is one of the important differences.

2658. Is not that a difference which pervades and permeates the whole administration of a system, whether you are looking at the profit and loss of a particular project, or whether you are carrying it on with some general ideas of the public convenience?—My answer to that would be, that supposing there was only one fraction of telegraph line to be made, as between Bombay and some important place, we will say 20 miles off, then I think the probability is, that the people actually personally interested in that particular portion of the telegraph would manage it better than the Government would manage it; but that when you come to extend the system of telegraphs over the whole face of the country the case is quite changed. Virtually, in the very nature of things, the interests of the whole body politic are involved in the proper working of the whole system of telegraphs, and the separate interests of the several isolated localities become merged in, and subordinate to, the common interest of the whole country; and under those circumstances, when the general interests begin to predominate, then it becomes proper for the Government to intervene and to act. It would be impossible to work a general system of telegraphs over a country, such as India, in a satisfactory way, without thorough co-ordination of all the parts of it. It is a very difficult question, no doubt, to draw the line at the precise point where the private interests cease, and the public interests commence to predominate; I quite admit that. But it is by no means difficult to say, at any given time, that in this particular respect the public interests

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Colonel *R. Strachey.* now prevail over the separate private interests, and that the time for Government action has therefore arrived.

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2659. Do you not think that the Government undertaking the telegraphs with what you have described as political motives, they consider that the political interest is that of their own convenience as members of the Government carrying on public affairs and correspondence, and that that is their measure of political interest?—I presume that that was the thing which originally induced them to adopt the construction of telegraphs.

2660. Does not that tend to exclude the consideration of the interests of individuals, the sum of which constituted what may be called the commercial interest?—As I have already endeavoured to point out, so long as you do not take security that the Government shall view the whole of the public interests properly, and regard the whole of them properly, then, I will admit fully that there is danger that the Government is taking up a duty which it should not take up; but if that security be taken, which I believe can easily be taken, by properly organising the administration, then there is absolutely no reason why the Government should not look after those general interests, or if you please to call them commercial interests, involved in the efficient working of the telegraph system, just as well as it looks after those general and commercial interests which are involved in the administration of justice, in the proper regulation of police, in the defence of the country, or in the proper arrangement of finances, and so forth, in respect to which every one is perfectly ready to trust to a Government.

2661. If the Government only exists for the benefit of individuals of the community, ought not the interest of individuals of the community, which we will call the commercial interest, to take precedence of that of the Government, and the interest of the Government to be only ancillary to the general interests of the people?—That comes simply to inquiring, when the two interests are conflicting, which for the moment is the most important; and that is a question which must depend upon the particular facts at the particular time.

2662. Is not the advantage therefore of a company this, that a company applies itself immediately and directly to the sources of profit, namely, the interests of each individual member of the community, to make the undertaking subservient to that, and to get the largest amount of profit; is not that one of the great advantages of a company?—No doubt that is the advantage of a company.

2663. Is not that an advantage which we lose when the Government proceeds upon what it calls its political interests, namely, the interest in carrying on its own correspondence amongst its own members?—If you compare the working of a telegraph business by a government simply actuated by what you call its political interests, that is the dispatch of its own personal business, with the action of a company actuated by a purely mercantile spirit, I will admit that the probability, so far as the general convenience of the community is concerned, is that the company will manage matters better; but then I entirely repudiate as my standard of what is good, a government actuated solely by such motives as the question in fact assumes. A government is a very poor thing if it does not quite as zealously endeavour to attend to all the

public interests, as to its conceptions of what is convenient merely for its own management of business. In India, moreover, where the very existence of the commercial community, even for a day together, depends so entirely on the thorough efficiency of the Government administration, it seems to me that it is quite impossible to view this efficiency otherwise than as the foundation or source of all possible commercial prosperity.

2664. Do you not think that it is an error into which the Government of India, perhaps more than any other government, falls by being in the hands of a particular class, and those foreigners, as compared with the natives of India, that they do give themselves up to what I will call the political interest, and that they shut their eyes to a large extent to the individual commercial interest in the conduct of affairs; is not that peculiarly the vice or error of the Government of India?—I do not agree with that in the slightest degree.

2665. Do you not know that the railway companies have had a perpetual struggle against that feeling on the part of the Government?—Certainly not.

2666. Do you not know, for instance, that the Government, because they carry treasure about, has enforced upon the companies an unremunerative rate for carrying treasure, and that because they grow opium they have enforced upon the railway companies an exceptional mode of carrying opium?—I know that they do neither of those things.

2667. *Mr. Marsh.*] Do they enforce any particular price at all for carrying opium and treasure?—They do not.

2668. *Mr. Ayrton.*] Do you think that the telegraph lines in India have been in point of fact laid out with a view to commercial communication, that is to say, to individual and private communication?—I think that probably they have not been so laid out, and I began by saying that my belief was that, under the present organisation of the Government, you could not expect what I consider to be a proper system of administration.

2669. When you speak of having a separate member of Council, charged with the affairs of the public works, am I to understand you to include in that the affairs of commerce and agriculture, which is, I think, without any special department in India, or would you include that in the Public Works Department?—When I came here to speak upon this subject I was not prepared to discuss the precise details of the best way of carrying out such a suggestion as I have made, and I do not think there would be any particular value in my expressing my personal opinion upon such matters.

2670. I want to know whether, in your idea, the Public Works Department in India would combine not merely the supervision and execution of public works undertaken by the Government, or whether you also intended to combine all those questions which relate to industry, and which are embraced, for instance, in the French administration, under the idea, not merely of the *Ponts et Chaussées* Department, but of the Department of Commerce and Agriculture, or whether you would keep them as two separate departments?—I should say that the general form which the administration of all civilised countries has taken rather tends in that direction, and I think that it is highly probable that the administration would be vastly improved if there were something

thing of that sort adopted in India also. There is no question in my own mind that it is a grievous defect in the administration in India, that there is no branch of the Government which takes cognisance of those important interests which you speak of.

2671. There is no department, is there, which merely accumulates and registers information and experience for the benefit of the public in matters relating to the agriculture and commerce in India?—None whatever, and there is almost absolute ignorance upon these subjects in consequence.

2672. And is it not the result of that, that the efforts, I may say, of one man who takes up the question are not registered and preserved for the benefit of others who follow him; but they generally die away with the individual, and the thing often has to be begun again?—To a great extent that is the case. I should say, however, that a certain feeble attempt has been made of late years to develope something in the shape of a register of the statistics of commerce in India in the Financial Department.

2673. But with regard to the enterprise of the interior, and of industry in matters of commerce and agriculture, has anything been done to keep alive the experience of the part or the efforts of the part?—I think very little indeed is known on these subjects.

2674. For instance, on the subject of growing cotton, all those efforts and inquiries which have been made are buried now in papers, are they not?—To a very great extent they are.

2675. Mr. *Weguelin*.] Have you been a frequent traveller by the Peninsular and Oriental Company's boats?—Yes; I have gone backwards and forwards several times.

2676. It has been stated by a witness that there were no second-class passengers by those boats; are you aware whether, on any of your voyages, there were any second-class passengers?—The principle of the Peninsular and Oriental Company is to carry first-class passengers on the other side

of Suez. At the same time they do not absolutely refuse to carry second-class passengers; and the last time that I came from Calcutta there were a good many gentlemen who did come from Calcutta as second-class passengers; but the understanding was that it was done rather in an irregular way, and perhaps the agent in Calcutta would have got into a scrape if it had been known.

2677. Do you know whether they were satisfied with their accommodation as second-class passengers?—They got their food, and they slept on the deck, as a great many first-class passengers did, and they had a place in which they could dress, very much the same as the first-class passengers. I know that they associated with the first-class passengers to any extent they pleased. They were not allowed to come upon the quarter-deck; but they were admitted on the fore-castle, perhaps the most comfortable part of the ship.

2678. Did they make any complaint as to their accommodation?—Not that I ever heard. Of course sometimes the ships carry a great many more passengers than they are constructed to carry conveniently, and under those circumstances everybody is a little apt to complain; it is very hot, and there is every inducement to complain.

2679. But there are certain berths reserved for second-class passengers, are there not?—Yes, I think in all ships there are.

2680. Mr. *Brooks*.] The cases that you mentioned, of second-class passengers, are exceptions to the general rule, are they not?—I think there is always a certain proportion of second-class passengers. For example, engine drivers, and people connected with railways, are sent out second-class from this country, and servants so go out, and people in that class of life, generally speaking; I cannot say what the ordinary number is, but no doubt the Peninsular and Oriental Company's officers here would mention what it is; but there is always a sensible proportion of second-class passengers.

WILLIAM THOMAS THORNTON, Esq., called in; and Examined.

2681. Mr. *Stansfeld*.] You are the Secretary of the Public Works Department in the India Office, are you not?—Yes.

2682. Have you any documents to put in, in addition to those which you have already furnished to the Committee?—I have a report by Major Champain on the recent working of the Turkish portion of the telegraph, which I should like very much to put in; it is very recent, and gives very important information (*delivering in the same*.)

2683. Have you any new documents which you propose to put in?—I think the only one is this report of Major Champain's; but there are also some papers which I shall have occasion to refer to. The Chairman asked me to see if I could get a statement made of the cost of the Persian Gulf cable. I have certain returns, but I should scarcely like to put them in, because they would be imperfect, but perhaps I may be allowed to refer to them in the course of my evidence, and then it can be settled whether they shall be put in or not.

2684. What is the date of Major Champain's report?—This is dated April the 12th, and I have two or three private letters from him which

contain little bits of information which are not here; but this is the official report from Constantinople, dated the 12th of April, and addressed to the Under Secretary of State for India; it gives a report of the recent working of the Turkish branch of the Indo-European telegraph. Major Champain was sent out to Constantinople with the intention of his going along the line, and reporting upon it, but he found that such an improvement had taken place during the last two or three months that he has not thought it necessary to do so.

2685. *Chairman*.] Has that improvement taken place since it was known that an inquiry was to take place upon the subject by this Committee?—I think that the improvement commenced before that, as far as I can recollect. Lord Lyons had put great pressure upon the Turkish Government, and I think they had begun to improve, if my memory does not fail me, before there was any intimation of an intention to hold this Committee. I do not think that the Turkish government knew anything of it; in fact, I am sure of it; because Major Champain did not know when he left England that there was to be this Committee.

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2686. A letter has been sent to this Committee from the Foreign Office, enclosing a copy of a despatch addressed by Aali, on the 11th of April 1866, to the Turkish ambassador here; have you a copy of that?—We have a copy of it at the office; the Foreign Office sent it to us.

2687. In which letter it is stated, is it not, that the Turkish telegraph system is almost free from blame?—It is so, but the statement is scarcely in accordance with our information. For instance, the letter says that, since the Turkish line was opened, there has been no such delay upon it of from three to five days, as the "Times" speaks of. But I have a paper here which makes out that the *average* time occupied by a message on the Turkish branch of the Indo-European telegraph was, throughout last year, nearly six days and eleven hours.

2688. Mr. Stansfeld.] Will you turn to the examination of Mr. Grimston at Question No. 582, where you will find that his evidence was to this effect, that he wrote a letter to the Indian Government in 1862, and he did not get an answer till the 9th of June 1864; and that that answer, when he got it, was, "That Sir Charles Wood is not as yet in a position to come to a decision on your suggestion." Can you explain the cause of that long delay?—The explanation is this: when Mr. Grimston's first letter came in, it came naturally to me; I showed it to Colonel Stewart, and he undertook to speak to Mr. Grimston about it. Then, after a conversation with Mr. Grimston, he told me that Mr. Grimston understood that we were not in a position to give him an answer, and that, therefore, the letter should remain unanswered. Two years afterwards Mr. Grimston wrote again.

2689. The letter remained unanswered in consequence of the verbal understanding with Mr. Grimston?—Yes; it was quite understood that Mr. Grimston did not expect an answer; it was understood that we were not in a position to answer it, but that the time might come when we should, and then he would get an answer. Two years afterwards he writes to much the same effect, and he gets an answer that we were still not in a position to give him an answer.

2690. The answer referring to the former letter, as well as to the more recent one?—Yes, it was an answer to both. But the reason why he got that sort of answer was this. What Mr. Grimston wanted the India Office to do was, to use its influence with the continental Governments to induce them to set apart one wire exclusively for the use of the Indo-European telegraph. It was felt that the India Office could not make such a proposition to foreign governments without engaging that a great proportion of the messages should be sent that way. Of course they would not have listened to the proposition unless we could have said that if they did set apart one wire for those messages, the messages should be sent, and we were not in a position to make such a pledge; but at the same time all the arrangements with respect to the Indo-European telegraph were then in so immature a condition that no one could foresee what arrangements would at some future period be made. There was some idea of our having a traffic manager in London for the purpose of the Indo-European telegraph, and it was thought possible that, at some future time, we might be in a position to make such an engagement, but the only answer we could then make was, that we could not answer then. And if the question were put now, we should be obliged to

give the same answer, or now we might give perhaps a more decided answer, because we know now that the messages will not be sent by the India Office, or anybody connected with the India Office, but by the telegraph companies, and it is for them, if they wish it, to make arrangements with foreign governments. They might make the pledge which the foreign governments would require, and which we could not possibly do.

2691. Have you any information as to the present state of the Russo-Persian line?—Among these letters from Major Champain, there is something which he says about that which I should like to read. I have here a letter dated the 10th of April, in which, speaking of the Turkish lines, he says, "the Turkish lines are still working surprisingly well; I see the daily report, and am greatly pleased and astonished at the late improvement in working. It was quite correct for Courtenay to write three minutes between this and Kurrachee. The land wire and cable were joined, and a message passed instantaneously. During the last few weeks, ordinary despatches have been received in Constantinople, both from India and London of the day's date. Little or no stoppage now takes place in the Pera office, and I expect the average for the beginning of April will be under two days. The last average I can make out for 'all through' messages is from the 1st to the 12th of February. 405 went from London to India *via* Turkey, of which the slowest took six days; the quickest, 2½ hours; and the average was 1 day 19 hours 40 minutes." Then there is the part about Russia. "By Russia, during the same period, 128 passed, of which the slowest took 20 days 15 hours, the quickest 16 days, and the mean 17 days 8 hours 3 minutes." And he goes on to say, "The fault does not lie on Russia altogether, but in great measure on our Persian line. The snow this winter has been fearful, burying poles and all."

2692. Sir Henry Rawlinson.] Up to what date is that report?—The letter is dated the 10th of April, and the latest report is up to the 12th of February.

2693. Mr. Stansfeld.] Will you turn to Question 570 in Mr. Grimston's evidence, where he expresses the opinion that the delays are as great in the Indian as in the Turkish system; that the delay is half-and-half between the Indian and Turkish administrations; do you think that that charge is borne out by evidence?—I think that Mr. Grimston is rather hard upon the Indian administration. I think that will be shown by the papers which I put in on the first day the Committee met, at page 75 and the following pages. Those pages show that in the year 1861 the Government of India, in consequence of complaints which had reached it of the mismanagement of the telegraphed address, a set of queries to the Chambers of Commerce in the three Presidencies, inviting any complaints, and also inviting any suggestions with reference to remedial measures, and here are the replies from the three chambers. It will be seen that they are not at all uniformly condemnatory. The Chamber of Commerce of Madras says, that its opinion of the general efficiency of the electric telegraph, for commercial purposes, is, on the whole, favourable. Then the Chamber of Commerce of Bombay says, that it has communicated the Government letter to the members of the Chamber, and has received replies from 25 firms, giving the following results, that out of 298 messages 274 had been received with reasonable punctuality and correctness, and only

only 24 with either important errors, or delays, or unintelligible, or so delayed as to be rendered useless. The Chamber of Commerce of Bengal is much more severe in its language, but fortunately it does not merely give its own opinion; it also gives as vouchers upon which that opinion is founded, the replies from the different firms to whom it had written. Those replies will be found, some of them to be unfavourable and some to be favourable; but there is something rather curious about the variety. When any firm confines itself to general language, it is then simply denunciatory, but when it becomes circumstantial, then there is a good deal said in favour of as well as against the Government administration. Here is one saying, "We make constant use of the wires," and "on the whole we are satisfied with their general accuracy;" and, except that I should detain the Committee, I might point to several things of the same kind. But the Government of India, in a very fair summing up of the reports that it gets from the different chambers of commerce, uses this language: "On the whole, the Governor General in Council thinks it must be admitted by the chamber," that is, the Bengal Chamber, "that considering the disadvantages under which the Indian telegraph labours, its general efficiency, as the Madras Chamber of Commerce observes, is favourable; out of 240,451 messages conveyed in 1860-61, only 139 were complained of as erroneous, a proportion which is .0575 per cent., or little more than one-half per 1,000; while of the commercial messages delivered in Bombay during April and May last, 92 per cent. were received with reasonable punctuality and correctness, $5\frac{1}{2}$ per cent. with important errors or delays, and only $2\frac{1}{2}$ per cent. so delayed or mutilated as to be useless." When it is recollected that the delays on the Indo-European Telegraph at certain periods were for weeks together; more than once, I think, we have been without any message at all for two or three weeks; and when it is found that only two or three or five per cent. is the average of delays in India, it is a little hard to say that the Indian administration is as bad as the Turkish. At the same time, as regards the Turkish administration, its deficiencies, I think, have been a little exaggerated. At some of those periods at which we were without any intelligence from India by the Indo-European Telegraph, we were also without any intelligence for days together from Constantinople, showing that the delay was between Constantinople and England, and showing that the continental administrations are anything but faultless.

2694. *Chairman.*] The correspondence to which you have referred bears date, I think, in 1861?—Yes.

2695. And that had reference, had it not, in a chief degree to complaints which had been made in India of the irregular manner in which the service between Point de Galle and the Indian Presidences, was carried on?—I think it was rather of general application.

2696. Have not the complaints, which led in a great degree to the assembling of this Committee, taken place since the opening of the Indo-European line to Kurrachee, and have they not been made chiefly with regard to the irregular and imperfect manner in which messages have been forwarded to and from Kurrachee, in India?—That certainly is the case; but at the same time the Government of India has, during the last two years, been doing every-

thing possible to improve the line, and more particularly the line between Bombay and Kurrachee.

2697. *Mr. Stansfeld.*] A great deal has been done lately within your knowledge in your department, has there not?—A very great deal. I think I can show that a great deal has been done. For instance, the Government not merely asked the Chambers of Commerce what they had to say against the management, but they also asked what suggestions they had to offer, with regard to its improvement, and it would appear from the correspondence, that the three great defects were considered to be want of insulation, want of English *employés*, and want of proper signallers. With regard to the first, I have a statement here of the quantity of insulators, brackets, wire, and all sorts of articles which the Government have indented for during the last year, and it amounts to just 86,500 *l.* worth. During the last year the Government of India made requisitions to the extent of 86,000 *l.* for the still further improvement of the line.

2698. Which requisitions have been complied with, have they not?—They have either been complied with or are in process of being complied with.

2699. And very rapidly, I believe?—There has been a good deal of delay. This statement, which I have in my hand, was made out in the store department, and there is this remark in it: "The bulk of these stores have been ordered some time. Owing to the novel construction of the insulators there has been delay in their delivery, and not more than half have been shipped. From the rigorous nature of the tests for wire only one contractor has been found to meet them. Much time has been unavoidably lost in endeavouring to get supplied from other quarters. About three-fourths, however, of the quantity demanded have been shipped or are in course of shipment. The other stores have also been shipped, or are about to be so."

2700. There has been no delay, therefore, as far as time is concerned, for the great loss of time has been by the contractors?—There has not, excepting in one particular. Together with the indents from India, came requisitions for wire for Persia, and as the wants of Persia, whether rightly or not, were believed to be the more urgent of the two, a larger portion of the wire from time to time supplied was at first set apart for Persia.

2701. You have the evidence before you, I think, of Mr. Walton, given on the 27th of April; have you any remarks to make upon that evidence?—It seemed to me, on going through it, that although it, no doubt, correctly conveys Mr. Walton's impressions, the impressions which he received two or three years ago, would no longer be correct. I mean that the defects which he found existing three years ago have either been remedied since, or are in process of being remedied. For instance, at Question 2064, where he is speaking of the number of resignations that had taken place among signallers, he says that he considers that they resigned because they were not sufficiently paid in most cases, and that they disliked being over-worked, and then he gives some examples of what he considers under-pay. I have nothing to say about this. I have no doubt that it was perfectly true when he said it; at least, I have nothing to say to the contrary; but, as I said, the Indian Government have

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been doing everything they could during the last two years to improve the management; and, among other things, they have increased the number of signallers from about 800 to 1,020. They have also authorised the formation of schools for the training of the signallers, and they have increased their pay, so that the lowest pay now of an indifferent signaller, a boy most likely of 12 or 14 years of age, is 36*l.* a year, and it may, if he is a superior boy, be 72*l.*; and the highest pay which a signaller gets, is 228*l.* a year. That being the case, it is to be presumed that there is no longer the extraordinary deficiency which he speaks of at Deesa, where he says there was only one clerk to attend to three different instruments at a time. Then, with regard to the use of the Morse instrument, at 2068, he says that they only employ a sounding instrument, that is to say, an instrument where the tape is not employed; I believe that is perfectly true. The Secretary of State, a very short time ago, suggested to the Government of India that they should employ the Morse apparatus in its complete form; but the Government replied that they were doubtful whether it would be a desirable thing, and it is still under consideration whether they shall employ the Morse instrument in its complete form or not.

2702. That you consider a moot point?—Yes, it is under consideration at this moment. Then, Mr. Walton, at Question 2074, speaks of the great imperfection of the lines in India, and he says, “the new insulators which have been introduced lately on Hamilton’s poles, are found to be very faulty;” and, in answer to the next question, he says, “I have heard them called Douglas’s insulators; I think they were an improvement by Colonel Douglas on Sir William Brooks’s insulators.” The fact is, that about this time last year, Colonel Douglas, who was then Director-General of Telegraphs in India, did send home Captain Mallock, an officer of the department, for the express purpose of devising some form of insulator which would be particularly suitable to India; and a very considerable number of insulators, upon a plan first of all suggested by Colonel Douglas, and matured, so to speak, by Captain Mallock, have been sent out; but they could not have been in India when Mr. Walton was there; they really had not arrived, so that I do not understand what he could mean by saying that they had failed. There really were no insulators in India before, except Sir William Brooks’s. What I have heard of Colonel Douglas’s insulators is, that their only fault is their being expensive; they are exceedingly good.

2703. The Douglas insulators must have reached India at a later date; have we had any complaint about them?—No, that insulator was not devised in India, but by Captain Mallock, with the help of the best electricians in England. Then, at Question 2080, Mr. Walton says, that sometimes a message takes two or sometimes three weeks to go from Bombay to Calcutta. At page 152 of the papers which I have handed in, there is a statement of the actual times occupied by messages between Calcutta and Agra, and Agra and Bombay, for the three years from 1862 to 1864 inclusive. There are the maxima times and there are the minima times. On one occasion a message did occupy 214 hours, that is the greatest time that it ever occupied in those three years. It took 214 hours once to go from Calcutta to Bombay; but if you take the average of all those years, it will be found that

49 hours is the average. So that there is really no proof at all that it ever took more than nine days. The average appears for 1864 to be 49 hours. Then in Question 2082, speaking of the centralisation, he says that a station-master can do nothing, but is obliged to send to Calcutta for blotting-paper, pens, sealing-wax, and things of that kind, I believe all that was perfectly true when he was in India, but it is one of those things which have been remedied. One of the suggestions to the Government by Colonel Robinson, the present Director General, was, that store depôts should be formed at different places, and that the Government has agreed to. Colonel Robinson objected quite as much as Mr. Walton to that extreme centralization. I mention all this to show that the Government are quite as much alive as Mr. Walton is to the defect of the administration, and have been doing everything that has been possible during the last two years to improve it.

2704. *Chairman.*] Still Mr. Walton’s allegations, according to his experience, were not without foundation?—I have not the least doubt that they were once in the main correct, although occasionally exaggerated; for instance, when he says that a message takes three weeks, when, as far as I can make out, no message ever took more than nine days. In another place he says, that there was a regulation as to the prohibition of the employment of natives in the department. There certainly never was any such prohibition. I believe that natives, as distinguished from Eurasians, have scarcely ever been employed in Bengal, but they have been employed always in Bombay and Madras. It is really very important that it should not go out to the world that the Indian Government have forbidden the employment of natives. Eurasians are preferred in the telegraph department; but I have figures here which will show that there could not have been less than 100 or 200 natives employed as signallers in Bombay and Madras, and the proof of it is this: we get from India every year a statement of the persons employed in the telegraph department, and the last statement that we have shows that the number of Europeans was 293, the number of Eurasians 613, and the number of natives about 1,400. We know that of the Europeans, 120 were signallers; but supposing that all the Eurasians were employed as signallers, and, in no other capacity whatever, they then would not make up the number of signallers who were actually employed. Those two, the Europeans and Eurasians, together, would only make 733, whereas at that time there were 820 signallers, so that, supposing every Eurasian were a signaller, it would still have been necessary that there should be some natives.

2705. Are you able to state whether there is or is not any prejudice against the employment of natives; that is to say, Hindoos or Mussulmen, as signallers in the department?—I have no knowledge upon the subject myself, except what I have received from reading or conversation; but what I have been told by officers of the department is this: that in Bengal they prefer Eurasians, because they understand English better; that is the only reason for preferring them. They do not employ Eurasians as distinguished from natives in Bengal, but merely because they can get a sufficient number of Eurasians.

2706. To go back to the question of insulators,
I see

I see a despatch written by Colonel Robinson to the Secretary to the Government of India, of the 23d of December last, in which he says that "Mr. Bailey has certainly earned the approbation of Government for the great improvements that have been effected during the last few months in the working of the Bombay lines; but, although much has been done, there is still an immense deal more to do ere these lines can approach that perfect state in which it is our object, not only for the interest of Government and the public, but also for the credit of the department to bring them to." Then he goes on to state: "The non-arrival of insulators and telegraphic stores from England is delaying the completion of the work of repairs, reconstruction and insulation, all over India, as well as in Bombay, to a serious extent; instead of these stores reaching India by the close of the rains, they appear never to arrive until the working season (October to April) is drawing to a close. I regret to say that, in the present instance, the Indian Department is almost wholly to blame." What department is that?—He means the department in India; he is exonerating the department at home; if you observe in the next words he says, "The indents for stores were sent in sufficiently early, and Captain Mallock was in England to expedite them, but the specifications which were to define the characters of those stores, and which my predecessor stated it was his intention to submit very shortly after the indents, were never sent in until after Captain Mallock had returned to India." So that we had not in England the materials requisite to comply with the requisitions. That is merely one isolated case, Captain Mallock came to England, and the documents which ought to have followed him did not follow him in sufficient time; that is one of the reasons why those requisitions have not been complied with.

2707. Mr. Ayrton.] He sent an indent for the stores, but did not send a specification with that indent?—He did not send the specification.

2708. How many months afterwards was it sent?—It is said that they were not sent until after Captain Mallock had returned to India; Colonel Douglas, the last Director-General, sent Captain Mallock to England with a requisition for stores, and he did not, from what cause I cannot undertake to explain, but from some cause he did not send in sufficient time the specifications which were required to enable Captain Mallock to get the stores which he was sent for. It was Colonel Robinson who succeeded Colonel Douglas, who says that when Captain Mallock returned to India he "brought this most vexatious matter to my notice."

2709. In fact, the department did really forget all about it till somebody came from England to remind them of it; forgetting that they had indented for stores, they forgot to describe what it was until somebody came from England, to tell them that they had forgotten it?—Instead of saying "them," I would say "him."

2710. The whole department; everybody was responsible, I should think?—I cannot say that everybody was responsible; I do not think that would be fair. It was Colonel Douglas that had sent Captain Mallock.

2711. The officer did not send the indent himself; it did not go through the Governor General in Council. Are they not all responsible for this mal-administration?—In this particular case

the Supreme Government gave Colonel Robinson authority to send an indent, and he did send it by telegraph, in the first instance.

2712. Chairman.] Will you turn to pages 4 and 5 of the Correspondence. Does the letter from the Government of India to the Secretary of State, written on the 10th of June 1864, disclose the whole of the reasons why the Secretary of State was advised not to sanction the transfer of the telegraph wires upon the railways to a public company?—We never had anything from the Government of India except that, and that was what we proceeded upon. We wrote to the Government of India, asking their opinion; and this was the opinion which we received from them; and it was upon this, and no other document, that the reply to the company was founded.

2713. The objection appears to be founded upon economical considerations connected with the terms which had been proposed by the Oriental Company?—Reading that letter, I should have said that the Government of India had little objection to the acceptance of the proposal of the telegraph company.

2714. You are not aware whether any objection is entertained in India to the employment of a public company in the manner proposed, upon any grounds of political expediency, or otherwise?—Certainly not. I should say, from the general tenor of the Government documents on the subject, they are rather in favour of the trial of a private company. I have no doubt that you yourself will recollect that, somewhere or other in this correspondence, they propose to put up a new line, or rather to allow any company to put up a new line, between two places, in order to try the experiment of private or joint stock management.

2715. The East Indian Railway Company was informed, in answer to an inquiry which they made of the Indian Office, for the reasons why the arrangements proposed could not be carried out, that it would be contrary to the usage of the Office to give any reasons. Can you inform the Committee why, the reason being so very obvious, it was not communicated to the company; because it would have enabled the company, in communication with the projected telegraph company, to have proposed other terms?—I do not myself, upon the face of it, think that the objection seems to be an economical one. Certainly, reading the letter from the Government of India, I should have said that they were rather in favour of a trial than otherwise.

2716. Let me read this to you. The Secretary of State, by the hand of Mr. Merivale, informed the secretary of the East Indian Railway Company, on the 1st of September 1864, that he has "come to the conclusion that it is not desirable that the railway company's public telegraph business be transferred to a separate company." On the 11th of January following, the secretary to the company, by order of his board, requests the "favour of being furnished with a copy of the report in question, or with any reasons which may have influenced the Government of India in drawing up the report." The reply to which was, "I am directed to acknowledge receipt of your letter of the 11th instant, and, in reply to the request therein made, to state that to furnish the directors of the East Indian Railway Company with a copy of the despatch received from the Government of India on the subject of certain proposals of the Oriental Telegraph Company,

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would be contrary to the usage of this Office?"—That is contrary to the usage of the Office, certainly.

2717. Is it contrary to the usage of the Office to furnish railway companies with copies of despatches from the Government of India?—It has been done frequently, but some time ago Sir Charles Wood said that it ought not be done, and he insisted that, in future, we should always give the substance of the despatches and not the despatches themselves. It is perfectly true that it was done till a very recent period, till a year or two ago; but Sir Charles Wood directed that it should not be done in future.

2718. Mr. Ayrton.] You are not asked merely to furnish a copy, but to furnish an intelligible reason. Is it contrary to the usage of the Office to supply an intelligible motive as well as to supply copies of documents?—The Chairman merely asked me to explain what is said here, and here the Office does not refuse to give reasons; what it does refuse to do is to give copies of a despatch containing the reasons.

2719. You will observe it is asked in the alternative to supply an intelligible explanation of what it is doing, and it seems to be silent upon that point; therefore anybody receiving that answer would assume that it was equally contrary to the usage of the Office to supply an intelligible motive for what it does?—It would be really rather more charitable to suppose that if the reason for not giving reasons was that it was contrary to the usage of the Office, that reason would have been given, but nothing of the kind is said.

2720. Chairman.] The last letter from the India Office concluded with these words, "It was not merely on anything stated in that despatch, that Sir Charles Wood came to the conclusion that it would be undesirable to transfer the railway company's telegraphic business to a separate company." If it was not on anything stated in that despatch, that Sir Charles Wood came to that conclusion, can you inform the Committee on what other considerations the refusal was founded?—I am utterly unable to state them; I myself thought it was a very great pity that it was not done. It struck me that nothing would have been more conducive to the improvement of the Government telegraphs than that the railway telegraphs should have been transferred to a private company; but I do not profess to explain this; I do not at all know what Sir Charles Wood had in his mind. This is what he says, but I never heard his reasons.

2721. As the matter now stands, the railway companies and the proposed telegraph company were left entirely in ignorance of the views both of the Government of India and of Sir Charles Wood upon the subject, until the publication of this letter of the 26th of January 1865, in these papers the other day?—So it appears.

2722. Mr. Ayrton.] You do not think that that is a mode which tends to facilitate and develop the industry and enterprise of India, do you?—I do not see how it can.

2723. Do you think that the real motive for not giving a reason was an indisposition on the part of the Government to expose to any public criticism the reasoning of that despatch from India?—If that were my opinion, I do not think it would be becoming in me to say so.

2724. How can the Government advance any

public objects by proceeding in this dark manner?—I cannot conceive how they can do it.

2725. Chairman.] Have you any later report than those papers which you put in on the first day of the meeting of the Committee, containing the working of the Persian Gulf part of the Indo-European line?—I have this report from Major Champain, which, however, relates chiefly to the Turkish part of it; and I have two or three private letters, speaking of the rapidity with which messages have been transmitted. I have already read part of those letters showing that in three minutes they got an answer from Kurrachee. I myself thought that it must be a mistake, and I wrote to Major Champain at Constantinople, telling him that I could not help thinking that the three minutes was a mistake for three hours, and he wrote back to say that it was no mistake at all, but a fact.

2726. According to your advices the line continues working in a thoroughly satisfactory manner, does it not?—If you will allow me I should like to read from these letters; they are very short, and they contain one or two things which are not in the report. I have three letters here of the 26th of February, the 27th of March, and the 10th of April. Perhaps I need not read the first, but I may be allowed to read the next; it is from Constantinople, dated 27th March. "February was a capital month; I saw the averages from the 1st to the 12th, showing times occupied by over 400 messages from England to India. The longest time was six days, the shortest 2½ hours, and the average a little over two days. Since then we have been working at least as well, and to-day Fao was passing despatches straight through to Adrianople, and *vice versa* of to-day's date, both from India and England. Still, a number of messages are sent, *via* Russia, which are greatly delayed *en route*, and for which we shall get the blame. I cannot believe that the London offices direct them that way, but I fancy they must be diverted on the Continent. It behoves the companies to see to this, and I have been advising Agathon Effendi to-day to send round a circular to the various administrations. The Persian lines have been breaking down lamentably of late, simply and solely because there are no line guards. The Persians will not pay the comparatively small sum that is absolutely necessary, and the result is that for more than two months the telegraph has been useless, or worse." With regard to what he says, that there are messages going to Russia; very recently Lord de Grey permitted a letter to be sent to the Foreign Office requesting that the attention of Her Majesty's representatives, at Frankfort and Berlin, should be called to the question. We inquired of the companies in London, and we found that the Electric and International Company sent all their messages *via* Constantinople and Belgrade, and that the Submarine Company also sent the greater proportion of them that way, and they suggested that in all probability they were diverted either at Frankfort or Berlin, and therefore we wrote to the Foreign Office, requesting that the Queen's representatives at those places should represent the question to the telegraph departments, and insist that the messages which were sent from England marked to go by a particular route, should go by that route. Two days ago, we received a letter from the Foreign Office, enclosing one

one from Sir Alexander Malet, at Frankfort, saying that he had spoken to the proper authorities upon the subject, who explained that without having the dates and other particulars of messages, they could not give an answer with regard to any particular one, but that they would take care that in future all messages should go as they were labelled. There is one other letter, which I need not read, dated the 10th of April, from Constantinople also. It is the one which I referred to before, in which Major Champain speaks of a message going to Kurrachee in three minutes. I think that all the other information will be found in the official report. There is, however, one letter, which came from Major Champain, dated the 30th of April, in which he says, "In continuation of Appendices A. and B. attached to my Letter 279 of the 12th instant, I have the honour to state that, during January 1866, 1,216 messages passed from Kurrachee to Constantinople by Indo-European telegraph, and 790 from Constantinople to Kurrachee. Of the 1,216, the slowest occupied 9 days 12 hours in transmission; the quickest came direct, and the mean time was 2 days 13 hours. Of the 790, the slowest took seven days; the quickest went direct, and the average was 2 days 6 hours. These results show a material improvement compared to those of the preceding month; but since January the route has been far better still.

2727. Have the India Office taken any steps with a view of bringing any influence to bear upon the Turkish administration?—I think that all the improvements have taken place in consequence of the pressure which the India Office has brought to bear through the Foreign Office. Lord Lyons has made the strongest representations at the instance of the India Office, and all that has been done has been in consequence of Lord Lyon's interposition.

2728. Do you know whether any steps have been taken for the purpose of putting the proper force of English signallers upon the lines in Turkey?—I think that whatever improvements have taken place are described in this report of Major Champain's.

2729. Have you a copy of the account of the cost of the construction of the Persian Gulf line?—I have had it made out, but it is very imperfect, as far as the cost of the construction goes. I have a better account of the receipts. What I have got here is a statement of the payments made in England on account of the Indo-European telegraph, up to the 28th of April 1865; but we have merely got the expenditure in England, but not that in India; we know nothing of the cost of maintenance.

2730. Have you an account of the number of messages carried each way since the opening of the telegraph?—Yes, I have it here for one year. I have a return showing the number of telegrams from the United Kingdom to India, and the amount due to the Persian Gulf Line for the same during the year 1865; it makes out that the number of telegrams was 11,070, and the amount due to the department 32,998 *l.* That is from the United Kingdom to India. Then there is another return, showing the number of telegrams from the Continent of Europe to India, which is 1,467, and the amount due to the department 4,843 *l.* Then there is a third return, showing the number of telegrams from India to the United Kingdom, and the amount due to the Persian Gulf Line for the same duration. 0.43.

ing the year 1865; the number is 8,403, and the amount 28,352 *l.* And then there is a similar return of the number of telegrams from India to the Continent of Europe; that number is 1,043, and the amount is 3,576 *l.* for the year 1865.

2731. That is from the beginning of March last to the end of December?—In February there appear to have been no messages, nor in January; January is a blank throughout, and February is almost a blank; in February there were less than 100 messages.

2732. Are those receipts a proportion of the sum of 2 *l.* 19 *s.*, which, we were informed by a former witness, is paid to the Indian Government out of the 5 *l.* 1 *s.* received here for an ordinary message to India?—I think that is the amount.

2733. What proportion of that 2 *l.* 19 *s.* do you credit to the Persian Gulf Line, and what proportion to the internal system of India?—I make it out 10 *s.* 6 *d.* to the internal administration, and the rest to the Persian Gulf; but there is a little discrepancy in the statement. I rather think that they charge one shilling less in India than is charged here; we make out the total sum to be 5 *l.* 1 *s.* for a message to India, but Colonel Robinson tells me they only charge 5 *l.* from India, so that would make a difference. If 5 *l.* 1 *s.* is charged, then the amount which goes to the internal administration is 10 *s.* 6 *d.*, and the remainder goes to the Persian Gulf Line.

2734. Have you any account of the working expenses of the line?—We have not any information at all about that.

2735. Have you any information in the India Office as to the sums disbursed monthly on account of the establishment?—Not a syllable.

2736. Where would that account be?—It is all under the Bombay Government, and they have the accounts.

2737. Sir Charles Bright.] You gave the Committee the average of the time occupied by a message from India to England lately, as being a little over two days; was that from Kurrachee?—It was in one of Major Champain's letters of the 27th of March, in which he says, "February was a capital month. I saw the averages from the 1st to the 12th, showing times occupied by over 400 messages from England to India. The longest time was six days; the shortest was 2½ hours; and the average a little over two days."

2738. That will probably be to Kurrachee?—Yes, it must be so, no doubt.

2739. We have had it in evidence that in the month of March the line between Kurrachee and Bombay was still working in a wretchedly inefficient manner; and that is taken from the daily reports supplied by the Indian telegraphic department of the maximum and minimum delivery between those places, from February the 1st to February the 14th the maximum is stated to be 4 days 3 hours 31 minutes, and the minimum 4 hours. That would give a mean of little more than 51 hours, or something more than two days; therefore Mr. Grimston's statement, that the delay in India was about equal to the delay in Turkey, would not be so very much over the mark as applied to a message from London to Bombay, seeing that there is two days' delay in Turkey, and two days' delay between Kurrachee and Bombay?—At any rate, he would make

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out that we were equally to blame, whereas only one-third of the blame is due to us. I have a statement also showing the time occupied on the Turkish line, and it makes it out to be rather more than six days for the whole year, and two days is only one-third of six, and not one-half.

2740. I am speaking about the same period that you are speaking of, about the early part of this year, and it appeared then that according to your average it is about two days on this side, and according to the statement in India, it is about two days even on so short a line as that between Kurrachee and Bombay?—This very great improvement has taken place in Turkey within the last few months, and it is perfectly possible, in fact, I think it is almost certain, that a corresponding improvement has not taken place between Bombay and Kurrachee. That has been always acknowledged to be the worst part of the Indian lines, and it is not likely that it could have been improved in nearly the same proportion as the Turkish portion, because the defect of the Kurrachee and Bombay line is partly a defect of construction. It requires better insulation, and the department cannot improve the insulation until they get their stores. On the Turkish lines the defect was the want of proper signallers and inspectors.

2741. Are the Committee to understand you that the improvements which are being carried out by the Government have not yet had time to show their results?—It is not possible that they should. Very considerable improvement has taken place on that line; but still it is acknowledged to be in a very defective condition.

2742. The report which you referred to as giving the mean of the messages between Calcutta and Agra shows also the mean between Calcutta and Bombay. I have taken that out, and, adding the two together, I find that the mean time is about two days between Calcutta and Bombay, so that there would be also a delay of two days between Calcutta and Bombay?—I make it out to be 49 hours. That statement shows the maximum times and the minimum times, and it also gives the maximum averages and the minimum averages for the last three months; and if you add those two together according to my calculation it would be 49 hours.

2743. Therefore there is a delay in India between Kurrachee and Bombay of about a couple of days on the average, and there is also a delay between Bombay and Calcutta of about a couple of days?—That was in 1864.

2744. In the same evidence it is stated that the working of the Bombay and Calcutta line was very unsatisfactory at the time the witness, Mr. Knight, left India, which was not very long ago, so that Mr. Grimston was not so very far wrong in saying that there was as much delay in India as on this side?—I never had the smallest idea of concealing the defects of the Indian system; they are acknowledged, everybody acknowledges them; but I think, considering that it is so bad, that there is no occasion to make it out worse; if it is only one-half as bad as the Turkish administration there is no occasion to say that it is quite as bad. Nobody defends the Indian administration; everybody says that it requires great improvement, and it is receiving very great improvement.

2745. I understand you that those improvements which Colonel Robinson has introduced under his new administration, have not yet had time to show their full results?—They can

scarcely be said to be carried out; eventually that will be the case, as the Government approve of them all, but it takes some time to get them into operation; for instance, the mere increasing of the signallers from 820 to 1,020 takes some time; they would not be fit for their work immediately; they would require some training, and the first step would be to put them into the training schools. All I have contended for is, that for the last 18 months the Government of India, being alive to the defects of its management, have been doing every thing it was possible that a Government could do to remedy them.

2746. They have discovered that for the last seven or eight years things have been very badly managed, and they have taken steps to improve them?—Great improvements have taken place during the last 18 months; and I say that it is during that time that the Government have set themselves heartily to work to improve matters.

2747. Sir *Henry Rawlinson*.] You stated, I think, that in Major Champain's Report we shall find all the details of the improvements in the working of the Turkish line?—You will get all the information that is to be had upon the subject.

2748. But are we to understand that that refers both to the question of signallers and of improved insulators, and any alteration in the management of the line; are all those details given?—I am speaking merely of the Turkish portion. I read the report a day or two ago, but I should not like, without looking at it again, to say whether those details are here or not. As far as I recollect, the construction did not require any improvement; I believe it is in a very fair state; what was wanted was, an improvement in the *personnel*.

2749. It was stated to the Committee, in evidence by Mr. Greener, that there was not only a great defect in respect of the signallers, but also in the employment of porcelain insulators and in the direction of the line; and that all those points require rectification before the line can be considered in working order. Have those points been taken into consideration?—I do not think that much attention has been drawn to those points; I think it is chiefly in the management of the line that improvement has taken place.

2750. With regard to the pressure which you state to be put upon the Porte by Lord Lyons, is there any official correspondence upon the subject which can be put in before the Committee?—I think it is scarcely of a character to be made public.

2751. Are you of opinion that the provisions of the Convention with the Turkish Government are at present fairly carried out?—At this moment they are fairly carried out; but even now there is considerable room for improvement.

2752. Still you think that they are fairly carried out?—I do not think that there is anything of which we have much right to complain. I question whether the Turkish is not as well conducted just now as the Austrian administration is generally.

2753. Is there any black mail at present paid upon the line to the Arab tribes?—I think there is, but I am not quite sure; I think Mr. Greener gives evidence upon that point.

2754. The line from Bagdad to Fao was laid down by British officers, was it not?—Yes.

2755. And the material was supplied by the British Government?—Just so.

2756. Has

2756. Has the British Government ever been reimbursed by the Porte for that outlay, either by a money payment or by carrying the value of the messages to account?—The Protocol of 20 October 1863, provides that re-imbursement shall be made according to a special arrangement to be established subsequently. I am not aware that any such arrangement has yet been made; but if not, it is now quite time that something should be settled.

2757. At present, are you aware whether Colonel Kemball, the Consul General and British Agent at Bagdad, is authorised to exercise any general superintendence over that portion of the line; he superintended the execution of it, but I mean with regard to the maintenance of it?—He certainly does exercise a sort of superintendence, but whether it is merely his influence with the Pasha which enables him to do so I cannot say. We could give him no authority to do it; it could merely be by his personal influence with the Pasha.

2758. Admitting that he does, through his position with the Pasha, exercise a general superintendence over that portion of the line, it would be interesting, would it not, to test the relative working of the two portions; that is to say, the portion between Bagdad and Fao, over which a European officer has the general superintendence with the portion, between Bagdad and Constantinople, over which no such superintendence exists?—I should think so.

2759. Are you able to give the Committee any information with regard to the relative working of the two portions?—I should think that one or two of the witnesses who have been examined could do so. I should think Mr. Greener could. Of course we have not had reports with regard to the working of specific portions of the line. We are only told how long a message takes in coming the whole distance.

2760-1. Has the question ever been considered of supplementing the convention, according to the express provision in the convention, by the introduction of some more stringent provisions with regard to the employment of British signallers?—It certainly has been considered, but I do not recollect, for the moment, the precise terms of the convention that provide for its being supplemented in that way. When the Turkish line was so very badly managed, we had proposals, which originated with Colonel Stewart, and were afterwards taken up by Major Champain, which contemplated the transfer of the Turkish line either to the British Government, or to British officers, or to a British company; and Major Champain sent in a proposal to the India Office, recommending that something of the kind should be considered; but before any steps were taken, it was suggested by the Foreign Office that Major Champain should go out to Turkey to see how the lines really were and what they required; and he has accordingly been sent out for the purpose of getting reports from him as to the working of the lines. When he got to Constantinople, however, he found that such an improvement had taken place that there was little to inquire about. Things are going on well enough if the improvement will only last."

2762. The question before us is especially that of permanence, is it not?—Precisely; and Major Champain certainly has very great misgivings as to its permanence. Everything depends upon who happens to be at the head of the Telegraph Department, and on what in-

fluence he has with the Secretary for Foreign Affairs, and so on, so that, there can be no certainty about the matter.

2763. The provision to which I refer is part of the 16th Article, which says, "Nevertheless the high contracting parties may introduce into it" (that is, into the convention), "according as necessity may require, such modifications as may be considered by common agreement to be useful and indispensable." Are the Committee to understand that no such modifications have been introduced?—No. Mutual agreement is required; we cannot insist upon anything of the kind; it must be by mutual consent. The feeling here, both in our Office and the Foreign Office, was that pressure might be brought to bear upon the Turkish Government if it were necessary, but that, of course, it would be better to settle the thing *à l'amiable* if possible.

2764. With regard to the Turko-Russian line, you have stated that a certain number of messages are still sent through Russia by the Russo-Persian line?—I do not think that any have been sent lately; they were some time ago, when Major Champain's report was made.

2765. Are you aware that any messages are sent the other way from India and Persia, that is, from Teheran by the Russian line instead of by the Turkish line?—I think it is not all improbable that some have been sent lately; because I saw, a short time ago, a letter from Mr. Walton, the director of the Mekran line, speaking of what was then the still continued mismanagement of the Turkish line, and saying that it was an extraordinary thing that messages were not sent by the Russian line, and asking for authority from the Bombay Government to send them that way.

2766. Would it not be in the discretion of the officer at Teheran to send a message through the Russian line, without having express orders to that effect from India?—I should think not. I should think that messages are labelled in India, as they are here, to go by particular routes; but I am not certain upon that point.

2767. We are talking now of the Persian line. Messages would run up to Teheran, under any circumstances, because there the lines diverge; they would go by Tabriz to Russia, or they would go by Bagdad to Constantinople?—Yes.

2768. Is it competent to the officer in charge of the office at Teheran to direct messages by that line or the other, according as he may think best?—He could only do it upon his own responsibility, acting for the best, if he did so. It would be rather for the officer at Fao or Bushire to determine by which route a message should go, whether by the Turkish branch or the Persian branch. But, of course, officers must, in the present state of the line, take a great deal upon themselves; and if one line were blocked up they would not hesitate to send by the other.

2769. With regard to the European line, you are aware, are you not, that there is an international convention between all the Continental powers with regard to telegraphic messages from Brussels, I believe, to the Turkish frontier?—Just so.

2770. And that the British Government is no party to that convention?—So I understand.

2771. That is because the telegraph lines are not in the hands of the British Government, but merely in the hands of private companies; but do you not think that it would be both possible and desirable that the British Government, acting for the companies, should be a party to that convention;

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tion; would it not improve the position of the telegraph companies in their communications with the Foreign Governments?—That is the opinion of the Government of India. In some very recent correspondence which we have received from the Government of India, they say that it would be very desirable that some such common understanding should be come to; at present they are out of the pale of that convention; but they do think it very desirable that some general arrangement should be made which should comprehend them.

2772. Mr. Marsh.] I think you stated that the pay given to those boys in India is from 30*l.* to 70*l.* a-year; are they natives or Europeans?—They are arranged in three classes; good, inferior, and indifferent.

2773-4. But are they natives or Europeans?—They may be one or the other. A certain number of them are Eurasians, a certain number are natives, and a certain number are Europeans; I think 120 are Europeans.

2775. Are all the messages sent in English through India?—Entirely, I believe.

2776. Does not that prevent native messages going, to a certain extent; and would it not be better to send them in Hindostanee?—One would think so if it were possible; but perhaps they would not go so correctly.

2777. Do not you think that there would be more traffic upon the lines, and that the telegraph would be more used if it was used in the language of the country rather than in a foreign language?—I am not able to say how the native merchants keep their books, or what language they use in their correspondence.

2778. How can you account for some of the messages from Bombay to Calcutta being as long as nine days, and on the average two days; what can be the mismanagement which should make them so long in going?—It is very bad unquestionably; there can be no dispute about that.

2779. Is it from mere general wickedness?—I have already explained that I have never been in India, and that my knowledge is entirely derived from correspondence and conversation, and I therefore cannot answer such a question as that. I have no personal knowledge of the subject.

2780. Mr. Ayrton.] Would you put it in this way, that probably the natives would use the telegraph a good deal more if their own messages were received in the native language, which has nothing to do with the mode in which they would be transmitted by the wire?—I do not know whether it would be safe for them to allow the telegraph clerks to translate them.

2781. Supposing a private company were undertaking the work for the convenience of the public, is it not probable that they would undertake to receive messages in the native language and transmit them in any way which was most desirable, and would not that meet a great want on the part of the natives?—I should imagine that a telegraph company would do what it thought was most conducive to its own interest; but it might not judge rightly, or its own interest and the public interest might not prove identical.

2782. You mentioned that you thought that the proceedings of the Government to improve the telegraph had not been influenced by the appointment of this Committee on account of Major Champain having proceeded to Turkey before the Committee was appointed. Are you aware that Major Champain was present at a discussion at the Society of Engineers, at which

the proceedings of the Government were condemned, and an intimation was given that this Committee would be appointed and the defects of the whole of the telegraph system pointed out?—I recollect the meeting, and that Major Champain was there. I do not recollect that what you alluded to was mentioned, but if so, I was wrong in what I stated. Major Champain must in that case have known that the Committee was going to meet, but at the same time I am perfectly convinced that it was not any fear of this Committee which influenced the Turkish Government. I am quite sure that it was the pressure brought to bear upon them by our ambassador at the instance of the India office.

2783. Have you considered what public advantage would ensue if the main lines of telegraph in India were brought into harmony with the main lines of railway communication?—I have not a doubt that it would be a very great improvement.

2784. Do not you think that ultimately all the arrangements and organisation both of trade and of Government, must settle down in India upon the main lines of railway communication?—I cannot doubt that along every line of railway there will be a line of telegraph.

2785. If all the communications, both commercial and official, proceed upon the basis of the main lines of railway, must it not be of immense benefit if the telegraph system were placed upon the same basis?—I have not the smallest doubt that wherever there is a railway there will be a telegraph, but there may be telegraphs where there are no railways.

2786. Would it not be of great importance that those parts of the country which are not immediately upon a telegraph line should be brought into communication with the railway line by telegraphs from the nearest stations, rather than by an independent system of telegraph as at present?—If I understand the question, I believe that it would be desirable to connect the telegraphs and the railway lines.

2787. Would it not be desirable to have the main lines of telegraph on the railway lines, and have other telegraphic communications subscribing to those main lines?—I do not think it necessarily follows that a line which may be the best for a railway, would always be the best for a telegraph. In the case of a telegraph, what is desirable, is that you should have the shortest line between two places, whereas in the case of a railway it may be desirable to diverge very much from the straightest line in order to take in places of commercial importance.

2788. Considering that time is scarcely to be counted in telegraph messages, is it of any importance that the telegraph line should be the shortest in point of length?—Very little, certainly.

2789. Is it not therefore of much greater importance that the general line of telegraph should follow the most used line of communication for all other matters?—I do not think there can be a doubt that the telegraphs should be, as far as possible, coincident with the railways; if it were merely for the convenience of repairs, that would be a sufficient reason.

2790. It would, in the first instance, secure the great main lines of communication being always efficient?—It would tend to do so.

2791. Having a basis of efficient lines, would it not also be desirable that all the rest of telegraphic communication in India should be by branches from the main lines of communication, rather

rather than by an independent system?—Supposing that the system of railways were sufficiently complete, it might be so; but it would not at all follow that the main system of telegraphs should be confined to so imperfect a system as the present system of Indian railways.

2792. Considering that they will be the main trunks of communication, would it not be far better that branch telegraph lines should go from the railway stations, so as to follow that which will become the general channel of communication in the country?—So far as it is possible.

2793. Take, for example, the telegraph from Bombay to Indore; you observe that at present it is a direct line following the railway, and considering that the whole of the traffic from Indore will come down upon the railway, would it not be an immense public advantage that the telegraphic communication to Indore should be by a branch from the nearest station on the railway to Indore?—I should think so, supposing that the telegraph stopped at Indore.

2794. Supposing that you pursued the Agra road for 200 miles, considering that your communication with Bombay would still be through Indore upon the railway, would it not be equally advantageous that the line of telegraph should pursue that line of communication, and still be brought in connection with the railway in the Nerbudda valley?—In that case you would be severed from the line of railway.

2795. Would it be an advantage that the general mode of communicating with the district north of Indore should still be through Indore and the railway?—I do not quite understand how that could possibly be, because there is no railway from Indore to Bombay; you would have a telegraph from the nearest point of the railway to Indore for the purposes of Indore, but it does not follow that it would be desirable to continue the telegraph from Indore either to Agra or anywhere else. It seems to me much better to take our Great Indian Peninsular Railway, as far as it goes.

2796. Would it not be a great public advantage that a country which is not immediately on a railway should be connected by telegraph with the nearest railway station, and so with the general system, rather than by any other means, inasmuch as all those persons who live in that district will practically communicate with the rest of India through the nearest railway station?—That would be a reason, I think, for connecting places on either side of the railway with the railway line of telegraph; but it does not at all follow that it would be desirable to continue the branch lines of telegraph further than the places which in the first instance they touched.

2797. Would it not be, on the same principle, desirable to extend the lines of telegraph as far as the lines of communication extend in connection with the railway stations; supposing, for instance, you take a place 300 miles on the Agra road, north of Indore, would not any person in that station wishing to come to Bombay, or wishing to go to Calcutta, or to go to any part of India, either go up to Agra, or come down that railway below Indore; would not that be the line of communication both for passengers and for all merchandise?—In all probability it would.

2798. Is it not, therefore, desirable that the line of telegraph should follow the general line of communication, and that it should go there-

fore to the Agra station, or to a station on the Great Junction Peninsular Railway?—I do not think that follows as a matter of course; for the very same reason for which it is desirable to have a line of telegraph from the nearest point of the Great Indian Peninsular line to Indore, it would be desirable to make a line of telegraph from the nearest point of the railway to the town that you are speaking of, 300 miles north of Indore, instead of continuing the line from Indore to that place. Supposing the place were only 100 miles from the railway, it would be much better to make a branch from the railway to that particular place than to make a line 300 miles long from Indore to that place.

2799. Would it not be better, even at the expense of a considerable increase of the length of the telegraph lines, that India should be supplied with telegraphs by branch lines from the main trunk lines of railway communication than by any other means, having regard to the convenience of the general public, seeing that the general public will communicate through the railways?—It being admitted that the most desirable thing is that the main lines of railway shall be coincident with the main lines of telegraph, it would appear to be desirable that in order to connect any place off the main line with the main telegraph line, you should make a branch line from the nearest point of the main line.

2800. Therefore, the Government of India having chosen to lay out the greater part of their telegraph system, or nearly the whole of it, wholly irrespective of the railways, would appear to have laid it out in disregard to the public interests?—I do not think that the premises would be admitted; because if you look at the map you will see that, to a very great extent, the lines of telegraph are coincident with the lines of railway.

2801. Is that the case, except in the Valley of the Ganges?—Certainly, that was my impression when I looked at the map.

2802. Is there any line of telegraph coincident with the railways?—I am very much mistaken if the line between Calcutta and Delhi is not for a considerable distance coincident with the railway.

2803. Is it coincident with the railway, or is it on a different route?—My impression is that it is coincident, but I do not like to speak without having the map before me; still, that is my impression, from my recollection of the map.

2804. Do you think that it was a provident thing on the part of the Government, having regard to the fact that you must touch at Bombay, or rather that the direct line of postal communication between India and England must be from Bombay, to make no line of telegraph between Bombay and Calcutta?—There is a line between Bombay and Calcutta.

2805. Of a direct character?—That depends altogether upon circumstances. Supposing that there was, as there is, a line of railway all the way from Calcutta to Agra, and that the probability was that there would be no direct line of railway to Bombay for 10 or 15 years, it might be well worth the while of the Government of India to make a temporary line along the railway to serve during the interim.

2806. Would not it have been better for the Government to have laid out the line of telegraph along the proposed line of railway from Bombay to Calcutta, so that it could be adapted to the railway system as soon as the railway was made,

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instead of their having taken a course which, in order to make their telegraph system efficient, would involve the pulling down and reconstruction of nearly the whole of the telegraph system of India?—I think it is quite a matter of calculation. To show what I mean, I would take the parallel case of railways; and I might ask whether it would be wise in a Government to make at once that sort of durable and solid railway which would be required 20 years hence, or whether it might not be preferable to make that sort of cheap American railway which would suffice till traffic was fully developed, and then at the end of 15 or 20 years to have a substantial railway. It is quite an open question, and it is just the same with regard to telegraphs. It might or it might not have been better for the Government in the first instance to have taken that line which would eventually be the right one, instead of taking that one which for the moment, would be more convenient.

2807. Do you think that that is a sound analogy considering that the American system was one which was devised upon the basis of the natural product of timber which existed upon the very line of railway in lieu of laying down a telegraph line in which you had to resort entirely to materials to be brought from England, and everything being of an exotic character?—The only analogy which I pointed out as existing between them was in the comparative advantages of a permanent arrangement and temporary expediency; that was all, and that is really a matter of calculation which depends upon circumstances; sometimes one plan will be cheaper in the end, sometimes the other.

2808. Can it be said then to be a temporary expedient, considering that it has been so exceedingly expensive; has it not been, on the contrary, as regards expense, a system which ought to have been permanent, but which, as regards incapacity, has been a system of a very temporary character?—I do not myself see the connection between expense and temporariness.

2809. There is nothing in their expenditure to justify the idea that there has been anything of a temporary expedient?—Yes, there has, in this manner. They have taken a line to Bombay which does not go along the line which will hereafter be traversed by the railway, and it is exceedingly probable that when the railway is finished throughout, they will then make a line of telegraph along that railway and that that future line will supersede the existing one, and in so far the present line may be called a temporary one.

2810. In coming to the conclusion that it is desirable to have telegraphy upon the basis of the main lines of communication, and that that telegraphy would be both of a railway and commercial, as well as of a Governmental character, and that the two former elements would greatly surpass in magnitude and importance the latter; do you not think it would be desirable to place the telegraphs in the hands of a separate Telegraph Company?—I think it would certainly be desirable to place the railway telegraphs in the hands of a telegraph company.

2811. Do not you think that, considering the difficulty which we have to surmount in India of the enormous expense of European supervision, it is extremely desirable to concentrate our efforts, and to obtain efficiency by bringing together the three elements of the Government, the railway companies, and the general public, into one line of communication?—If the meaning of that ques-

tion is, whether it would be desirable to place the Government telegraphs, as well as the railway telegraphs, in the hands of a private company, I should say that it was exceedingly doubtful whether that would be an advisable measure.

2812. Having regard to economy and permanent efficiency, and to the fact that the Government use of the line of telegraph is not sufficient to maintain it in a state of high working efficiency, do not you think that it is desirable to concentrate the whole into one united effort?—I think, on the contrary, it would be very desirable to have in India a competition between a Government telegraph system and a private company's telegraph system. I think it is exceedingly probable that the existence of two different systems of management, side by side, would produce an emulation between them, put them both upon their mettle, would compel each to do as well as it could, and deprive either of any excuse for not doing as well as the other, and in that manner it seems to me exceedingly probable that both would work infinitely better than if all the the telegraphs were in the hands of one company. A private company in India, removed by some thousands of miles from its board of management, and having a monopoly, would, in my opinion, possess no superiority over Government agency, and would be more likely to do worse than better.

2813. Do you think that any advantage is gained from competition where the subject-matter competed for is not sufficient to sustain the competing parties?—Unquestionably if there is not traffic enough for two systems of management it would not be desirable that there should be two.

2814. But considering that, at present, the railway companies and the Government are equally sustaining a great loss; is there any reason for supposing that there would be enough telegraphy in India for many years to come to sustain two competing systems?—It is very possible that though they are both sustaining a great loss, and there is no doubt that the Government are sustaining a great loss, though it is also receiving a very large revenue, yet I think it is quite open to question whether the reason why so few messages, comparatively, are sent by the telegraph is, not because the management is so indifferent. If it were greatly improved it is quite possible that the traffic might be increased very largely, and much more than in proportion. It is quite possible that if there were two systems of telegraphs in India, and that they were administered well, and worked well, there would be traffic enough to give a profit to both parties.

2815. At present, it would seem to be in this condition, that the Government are guaranteeing two competing parties out of the public revenue, paying the loss that each occasions to the other?—I am not at all defending the present system; I think it has hitherto been very bad; and I think it very desirable that one of the systems of telegraphy should be transferred to a private company.

2816. Still, a private company, exposed to the competition of the Government, would be in a very difficult position, would it not, especially when the Government were quite content to go on with a system which entailed upon it a loss of 100,000*l.* a year?—I think it rather an assumption to suppose that the Government would be so content. My impression is, that if by the side of the Government line a line were worked by private

private enterprise, the Government would not be content with any inferiority to that private management, but would feel bound to do at least as well.

2817. Do you think that it would be possible for any private company exposed to the competition of the Government to exist, if it went upon the basis of profit and loss?—That depends upon whether the Government acts regardlessly of profit and loss. Though its main object may not be to make a profit, it does not follow that it would recklessly charge any fares whatever.

2818. If it has not prescribed for it, by the exigency of the position, the inevitable results of profit and loss, how could it be on a par with a private company with which it enters into competition?—I do not know why the Government should be supposed to be indifferent to gain. I think, in all probability, the Government would be very well pleased if the telegraph were a subject of profit to them.

2819. Still, as a matter of fact, the Government does disregard all the results of profit and loss; and do not we find that its ideas or hopes of profit easily slide into the consideration of loss, without creating any disturbance to the mind of anybody?—Judging from my own official experience, I should certainly say not. I find the Government of India complaining bitterly that some of their irrigation works do not pay, because they have charged too low water-rates; they are lamenting bitterly that they made a mistake in not charging sufficient rates in the first instance. I have not the smallest doubt that the Government of India are sorry that the telegraphs do not pay.

2820. Do you happen to know that in the administration of the Great Indian Peninsular Company, the Government nearly ruined that undertaking by enforcing upon it unprofitable

rates, and that it has been with the greatest possible difficulty that the directors have induced the Government to recognise commercial principles in carrying it on?—I think it very probable that the Government have made many mistakes in their control of the proceedings of the railway companies; but I did not know that the Government had nearly ruined the Great Indian Peninsular Railway; on the contrary, I thought that it was on the point of more than 5 per cent.

2821. That is in consequence, is it not, of the railway company having at last induced the Government to reverse its proceedings and policy?—I rather believe that one chief cause why that particular railway did not at first pay better than it did was because there were not proper arrangements for the conveyance of traffic. I recollect that you yourself, when you did me the honour to call upon me, after your return from India, pointed out some very great defects in the management of the company.

2822. *Chairman.*] Is any cognizance taken in the India Office of the line between Diarbekir and Alexandria?—None at all. We know of its existence, and we know that the Turks are not in a condition to work it, and that they regret that any messages should have been sent to be forwarded by it. I find in some of my papers that Agathon Effendi represented either to Mr. Courtenay or to Major Champain that they were not in a condition to guarantee the efficiency of that line. If I recollect rightly, it is a Turkish government line.

2823. Have you got with you a copy of the Act of the government of India regulating the telegraphs?—Yes, this is the Act of 1860, for regulating the establishment and management of electric telegraphs in India. (*Producing the same*).

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2824. *Mr. Stansfeld.*] You are at present Director General of the Indian Telegraph Department, are you not?—Yes.

2825. How long have you been at the head of that department?—Since last July.

2826. Great dissatisfaction has been expressed with the working of the department in the time previously to your taking charge of it?—Yes.

2827. To what do you ascribe the defects in the working of the system?—Partly to a weak establishment, weak from false economy, *i.e.* underpaid, and too few in number. Partly to the peculiarities of India, and partly to being dependent on lines erected with great rapidity. During the mutinies, the telegraph system of Northern India was greatly injured; at the same time, its enormous value, as an instrument for political and military purposes was demonstrated. The result was the establishment of electric communication as rapidly as possible, on any kind of support, the perfecting of the lines being left to follow. This reconstruction has since been pushed on without stint; but it has had much to contend against. Skilled labour and materials cannot be commanded in India, and much of the material sent out from England, though well suited to the climate of this country, has proved quite unfit for the tropics; *e.g.* the beech tops and porcelain insulators, which were succeeded by the Brook insulator, are to be replaced by

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something better. I must, however, observe that I found that the complaints of the public press against the Indian telegraph, exaggerated; indeed the opinions of the press in India cannot be accepted without reserve. The Government of India is almost despotic; the press of India, therefore, represents the opposition, and the acts of Government are the pabulum on which it feeds; and Government servants are not allowed to reply to personal attacks; it follows that the press, practically uncontradicted and irresponsible, is not always so correct nor careful in its accusations as it ought to be.

2828. With regard to the pay of those employed in your department, of all classes, do you consider that the pay is now arranged on a satisfactory basis?—Yes, I think it is, the old hands who have left the department are applying to return, those who are there express themselves very well pleased; all good evidence that the salaries are sufficient.

2829. Are you able to get efficient and reliable persons for the pay that you offer?—I think we shall do so; we are at present in want of recruits; but from the fact of those who have left the department wishing to return, I think we shall get men without difficulty.

2830. In speaking of the actual present condition of the telegraphic system of India, what results should you say are already obtained?—

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The administrative staff have now their hearts in their work; the offices are fully manned; the signallers are not overworked; consequently, messages whilst transmitted with greater speed, are now fairer, free from mistakes. The merchants of Calcutta tell me they have little to complain of, provided their cypher messages are not interfered with. These messages cannot be thought about, consequently cannot be corrected, consequently come with more accuracy than those transmitted in English by signallers not well acquainted with the English language. I fully expect to see the Indian lines, before June 1867, equal to any in the world, excepting where the physical difficulties of the country impose peculiar obstacles.

2831. Do you refer to the system of telegraphs in India as a system existing mainly for the use and benefit of the Government, or for the use and benefit of the public at large?—I think it was constructed, in the first instance, for the Government; the first idea was to make a more speedy communication between the different military stations.

2832. And it was those considerations which determined the line which the telegraph took?—Undoubtedly.

2833. But now a wider view is recognised?—I think that the Government and the public, as well as the telegraph administration, consider the telegraph department an institution like the Post Office, *pro bono publico*.

2834. What does the public in India say to this?—They recognise this view, and are very angry if precedence is granted to anybody, even to the Government, except in urgent cases.

2835. If they think they have cause of complaint, they do not hesitate to complain?—They do not hesitate to complain.

2836. Is there any limit or check to the transmission of Government messages?—Yes, a very strong check; the check on the purse. Every message must be prepaid, even if sent by the Governor General. Every service message is also examined by a special branch of my office; and if not, apparently on *bonâ fide* Government service, and of such urgency as to justify resort to the telegraph, it is submitted to Government, who call on the sender either to pay or afford a satisfactory explanation. The result of this censorship is the reduction of the telegraph receipts for service messages from 22,000*l.* to 10,000*l.* per annum.

2837. That would operate, would it not, as a very practical check upon the discretion of the Government officer?—A very practical check indeed.

2838. With regard to the possible detention of messages in the various offices to suit the convenience of the clerks, do you think that that ever occurs?—I think it extremely improbable—impossible, as a rule. On a message being tendered to an office, the minute, hour, and date is returned at once on the message by the receiving clerk; the signaller who sends it is obliged to enter the time of despatch; the signaller who receives it into the first office into which it is received for repetition also enters time of receiving it; the signaller who sends it on gives his time, and so on, until it is sent out of the final office. Hence, when the copies of the messages are examined, any special delay is discovered and punished. Further, the date and time of its first despatch being telegraphed with the message, any extraordinary delay becomes

known to the receiver. I do not think it is possible for such a thing to occur without explanation.

2839. Do the Indo-European messages meet with any special preference on the Indian lines?—Yes; we have had a line almost constructed for their purposes, from Agra to Kurrachee, whenever there is any interruption upon the other lines, they get an alternative line granted to them without extra charge, and they have all their messages repeated without extra charge. We find very few mistakes in the Indo-European messages, that is to say, in the Indian portion; of course they come in with their mistakes from the other side.

2840. What machinery have you for examining the accuracy of telegraphic messages?—Every message is compared with the original, as sent by the sender. There is a special establishment for the purpose of examining and comparing each copy with the original message. When mistakes occur, the signallers in fault are fined. The number of errors within the last few months is very small.

2841. Have you either heard, or read the evidence which has been given before this Committee, upon the subject of telegraphic communication?—Yes; I think a great deal of it is antedated; it goes back three or four years; and there have been immense changes in the last three or four years. Great objection is made to the sounding instrument, but it is highly approved of in America, and they like it in India, they say that with the tape they cannot get good messages in bad weather, that in wet and bad weather the marks upon the tape are all blurred, and run into each other, and uncertain. I do not quite share that opinion myself, I think that we might have both the sounder and the tape on the same instrument, but the tape is almost universally objected to in India. The sounder is certainly better than the needle instrument which is used on the railways generally.

2842. What rule do you follow in the employment or non-employment of natives on the telegraph?—We have no special rules; we take native, Eurasian, or European indiscriminately; we have a few very able natives, but, as a rule, they have bad ears for the sounds, learn slowly, and cannot think in English. We want men to whom English comes naturally without having to translate it. A native reads and writes well, is careful, sober, and steady, but he is slow, and objects to moving; he does not like leaving the district he was born in.

2843. He objects to sudden removals?—He objects to all removals. If you want to move him from Madras to Bombay, he objects to going, which the other man never does. I observed it is mentioned that messages are constantly divulged in the Bazaar before they are received by the person to whom they are consigned. I do not believe a word of it; who is to divulge them? not the signallers, for they have no communication with the peons who take out the messages, and the station-masters of the principal offices are assistant superintendents; gentlemen who go out from here on very good salaries; they go out on 250*l.* a year to commence with; they would not divulge secrets; they are not signallers at all; they are clerks in charge of those officers *pro tem.*, till they get into a higher position. I think there has been some gross misunderstanding in the matter; I do

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not know where people could have got the idea. Another thing is, that some of the signallers have risen to a very high position; one is receiving 1,260*l.* per annum. Surely, if such general bribery and corruption ever existed, some of these would have known and exposed it. Then, I feel sure that the times which messages are said to take to go from Calcutta to Kurrachee, and from Bombay to Kurrachee, have been rather exaggerated. We look upon 18 hours as an enormous time for a message from Calcutta to Kurrachee, which is 1,700 miles; the average is about 4½ hours, and sometimes they go in half an hour. I see it also mentioned in the evidence that a station-master gets no extra pay; whereas the fact is, that he gets from 4*l.* to 8*l.* a month in addition to his ordinary pay, free quarters, and a uniform.

2844. Have you any reason to suppose that the servants of a private company would be more accurate or less liable to be bribed than those of the Government?—Most assuredly so. It is notorious that private companies in India cannot command honest agents; were it otherwise we should see a great deal more English capital invested in commercial operations in India, operations that require only honest agency to ensure most handsome profits. The Government, on the contrary, has a great command of agents. Its service is permanent; it grants liberal pensions, and its servants have better position and better prospects of advancement. Moreover, sins of omission and commission against the Government are not so likely to escape detection as those against a company. It is hardly possible that all the corruption in the railway disposal of traffic which has lately been brought to light could have been unknown to the civil authorities all over India; they, uninvited, took no notice of them; but had the railway been a Government institution, it would have been their duty to have at once investigated the truth of the rumours and reported them to Government.

2845. Have you any knowledge of the working of the railway telegraphs?—They work very fairly, but they do not pay their signallers anything like as high as we do, nor do they expect the same amount of work from them; they work principally with the needle instrument. I know the superintendent of the East India Railway Telegraph very well; he frequently comes and has a conversation with me about telegraphic matters; he is my informant that they cannot afford to pay so well, and cannot obtain such good work, as the Government department; that they cannot afford to pay anything like what we pay for signallers.

2846. Do not you think that their service is done well?—They do it fairly, but they do not expect the same amount of work, and they have natives almost entirely.

2847. To what extent do the Government telegraph lines follow the lines of railway?—Where a railway is open, almost entirely. We can make no use of a line until it is open, especially in a hilly country, or where there are rivers; it is easier to travel on any country foot-path. One of my best measures was to alter the line from Benares to Allahabad, because the Jumna Bridge was opened; to have done so before would have been inexpedient. We take the best communication that we have, and when that communication ceases to be the best we take the new one; we open a new line and take down the old one, and utilise the materials

2848. And do you, wherever you can, bring the Government line of telegraphs into harmony with the line of railway communication?—Yes, before I left India I made a proposition to the Government to give two classes of licenses, the present license is limited; I proposed that one license should be for those companies who would not combine in a general system, and a first-class license for all those who were prepared to go into one general system for the whole of India; we do now work with the railways almost in every case. Many messages travel by the mixed line, of railway and Government.

2849. Are there any important telegraph lines near which there are neither railways nor roads?—Yes. The line to Arracan and Burmah is for many miles through an almost uninhabited forest; that from Kandy, in Ceylon, to India is almost as bad, so are the lines on the east and west coast of southern India; the lines in Assam, between Mooltan and Kurrachee are also badly off as regards roads for inspection. A principal mode of moving in those countries is by water. From Chittagong to Ateyab there is no post road.

2850. How would such a line as that be inspected and maintained?—The men have to cut their way with hatchets through the jungle and to travel upon elephants.

2851. It is necessarily very difficult and very expensive labour?—Yes, it is very difficult and very expensive, it is a very important line, it leads to the great rice ports, but the country through which it runs is terribly unhealthy, wild and unmanageable. Shortly before I left Calcutta, wild elephants had destroyed a mile and a half of line in one night; and at all times men are afraid to travel through the forest, so infested are they with wild animals. You cannot compare India with England, the terms are not commensurate.

2852. What is your opinion upon the subject of separating the management of the railway telegraph lines from the management of the railways?—It is hardly my province to speak about that. I should think it would be better carried on by the railways, the work would hardly pay two administrations.

2853. And would you have the railway telegraphs exist mainly for the use of the railway lines?—Undoubtedly there is a great advantage in the railway officials having the thorough command of their own telegraphs. The Railway companies possess peculiar facilities for transporting their stores and inspecting their lines. On the East Indian Railway, the wires are in some places carried on stone monoliths, weighing, I should say, roughly, 2½ tons each. No private company could afford to use such weighty materials, but the railway authorities avail themselves of empty trucks for their transport, and have other similar advantages.

2854. Just to come back to the question of the proper direction of the telegraph lines, as rapidly as you could affect the change, you would approve of the telegraph being laid down along the lines of railway, and connected with branch telegraph lines with places right and left?—No, I do not like telegraph branch lines, we like loop lines, so as to give an alternative in case of anything going wrong on one line.

2855. As a matter of fact, you are gradually bringing the Government telegraph system upon the lines of the great railway communication?—Yes, and we have been doing so for some years, and not only with regard to the railways, but where the Government are making a new trunk road,

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road, and the telegraph runs three or four miles from it, we bring the telegraph on to the road.

2856. *Chairman.*] Do you know how many lines of wire the East India Railway Company has upon its posts?—It varies very much; in some parts there are two, in others four, and in some six or eight.

± 2857. How many wires have the Government upon the lines constructed upon the railways?—I think the Agra line has three wires.

2858. I suppose those monolith posts of the railway company would carry any amount of wires?—Yes, they would undoubtedly.

2859. How far do they extend?—I do not know exactly; they are not very numerous. I have seen very few of them. I should say that the greater portion of their wires are upon the old wooden posts.

2860. Do the Government pay the railway company anything?—The Government rent a wire from the Sind Railway, until their second wire between Kurrachee and Hyderabad is ready, they do not pay for putting their lines on the railway; they only just carry the telegraphs parallel to the railway, just inside the fence.

2861. Have the Government no offices within the railway stations?—None whatever.

2862. So far then as there are upon some portions of the railway lines the Government and the railway telegraph system there is a double service?—There is a double service, but they do not largely interfere with each other, the railway get all the traffic of short distances, *i.e.*, between places where there are no Government offices, Between Burdwan and Calcutta there are no Government offices, but many railway station offices.

2863. The railway telegraph does not connect with Calcutta, I believe?—No, it does not come into Calcutta.

2864. How does the Government wire come into Calcutta?—By a cable under the river, at Barrackpore, 14 miles above Calcutta.

2865. Where the Government line is transferred to the railway line the whole length of its course from Calcutta to Delhi, they would have for about 1,100 miles, two parallel systems competing with each other?—Yes.

2866. Would not that strike you to be, to a certain extent, a waste of money?—They do not fully compete with each other, because the railway stations are not in the towns. The railway station at Patna is pretty close to the town of Patna; but the Patna civil station, where the Government telegraph office is, is a mile and-a-half or two miles from the railway.

2867. In other words, to make the railway system as useful to the public, you would have to establish connections between the stations and the different towns?—Yes.

2868. For which no capital is guaranteed by the Government?—None whatever.

2869. You stated that you thought that some of the complaints which had been made of the working of the Government system were exaggerated?—I think so.

2870. And also that they are antedated?—There is no doubt that two years since messages were very slow, but when I took charge in July last, I was surprised to find that the great mass of messages were not near so long in transit as I had understood them to have been. I particularly remember noticing that if messages went all the way to England at the same rate as to Kurrachee, the time would be only $2\frac{1}{2}$ days.

2871. Was not it about that time that the

public had been complaining bitterly of the delay in the transmission of their messages from Kurrachee to India?—Yes.

2872. To what cause was that dissatisfaction due?—I imagine that a good deal arose from the line not being in good order, from the want of insulation and the enormous distances between the stations, which were perhaps 150 miles apart; hence, when an interruption occurred, a man had sometimes to travel 70 or 80 miles ere he reached the injured portion. When an interruption occurs the line rider of the office at each end of the interrupted portion immediately starts to travel along the line until he finds and repairs the part injured, or meets the other line rider; where there are railways they travel by rail, otherwise on elephant, camel, horse, or foot, according to the nature of the country. This, of course, involves a delay of many hours, sometimes days.

2873. Was there only one wire between Kurrachee and Bombay for messages both ways?—Yes, only one for messages both ways.

2874. So that you were obliged to clear occasionally all messages to be sent in one direction on the other wire?—Messages to and from occupy the wire alternately.

2875. And the line had no insulators upon it in some places?—There were no insulators upon the greater portion of it.

2876. That was the condition of the line, was it not, before the Persian Gulf line was opened?—I should rather say there were insulators upon all the lines; but they were such bad insulators that they were not of any use. They first tried the experiment of porcelain insulators, which is what is usually used in England; but they were not found to answer in India, on account of the great fall of rain, which is sure to find its way into every crack, flaw, or porous portion that can absorb moisture; then the electricity from thunderstorms charges the wire and splits the insulators.

2877. Is that of frequent occurrence?—Yes; I have known as many as 10 posts destroyed in half-an-hour by lightning.

2878. In what part of India?—In any part of India, the wooden tops of the iron Hamilton standards suffer in the same manner as the insulators from lightning.

2879. Do you recollect when the line was made between Kurrachee and Bombay?—No; it was opened long before I had anything to do with it.

2880. Whatever it was, no addition was made to it, and no particular provision was made for enabling it to receive and to convey the great amount of European traffic which was to be expected from the opening of the Persian Gulf line?—A special wire between Kurrachee and Hyderabad was rented from the Sind Railway Company, and no extra wire between Hyderabad and Bombay has been waiting for insulators for some months past, as many insulators as the manufacturers had turned out were sent overland last month, at an expense of nearly 2,000 L., at my urgent request.

2881. Where was the wire waiting?—On the ground, waiting for the insulators at different places, ready to be put up the moment the insulators arrived.

2882. Where are the insulators at this moment?—I think that they are probably being put up at this present moment; I passed them at Alexandria in the middle of April.

2883. Then within a reasonably short time there will be a double wire from Bombay to Kurrachee?—Yes, and I hope there will also be

be a double wire also from Kurrachee to Calcutta properly insulated.

2884. I see a long letter addressed by yourself as officiating Director General of Telegraphs to the Secretary to the Government of India, dated the 18th of October last, on the subject of re-organization; that, I suppose, embodies your views as to the measures which, in your judgment, ought to be taken for altering the system?—Merely for altering the administrative system.

2885. Have you made any other report?—On my way home from India I wrote a report upon the past three years, with recommendations as to what should be done to make the line thoroughly effective; the principle I advocate, is to be always in advance of requirements that may be thrust upon us, and to use the best material that European science has or may devise.

2886. Have you a copy of that report?—No; I have no copy of it. I sent it to India to be submitted to the Government. If I had known of this Committee, I should have brought it with me; I sent back an immense number of valuable documents and statistical returns showing the results of the working of the past three years, which would have been undeniable and conclusive evidence of the state of the Indian lines.

2887. I take it to be the general tenor of your evidence that the defects in the Government telegraphic system of India were due originally to the 'imperfect construction of the lines':—Partly to the imperfect construction of the lines, and partly to over economy in regard to the establishment; striving to save money.

2888. In both which respects you, since you have taken charge of the office of Director General, have pressed your views strongly upon the mind of the Government?—Yes, and the Government have given me every thing that I have asked for.

2889. Mr. Stansfeld.] Does your report, which has been put in, describe the system of superintendence and dividing the various lines into districts?—No, I have it in my pocket; it is only a working map, which I happen to have with me (*handing the same to the Honourable Member*).

2890. This map shows that you have subdivided the responsibility of management?—Yes, each superintendent is responsible for the working of that portion under one colour, as shown on the map; he is assisted by four assistants who have complete charge of the executive of the subdivisions, the object being to make every person take an interest in his work.

2891. So that every appeal is no longer to head quarters?—All appeals from the public come to head quarters.

2892. And are they then sent down to those superintendents?—No; we have the means at head quarters of investigating complaints; every message, original and copied, goes into a special department in the Calcutta Office for examination.

2893. And the business is managed in each of those districts by a superintendent?—Yes, the actual maintenance and working of the lines are.

2894. And the business of the whole is revised at the head office at Calcutta?—It is supervised by the Director General, whoever he may be. The Calcutta is a kind of audit office.

2895. How many such districts are there?—Fourteen.

2896. How many miles of telegraph communication altogether are there in India?—About 14,500.

14,500.

2897. That includes the Government lines only?—Entirely the Government lines; we have nothing to do with the railways, beyond requiring that they should work on the same system as we do; I mean the system of interchange; and this is solely for the convenience of the public.

2898. Do you at all know the amount of the gross revenue at present?—It was about 100,000 £. last year.

2899. When you speak of 14,500 miles, do you mean miles of wire?—No, the lines.

2900. What is the amount of the annual loss?—Setting aside the interest upon capital, it is about 40,000 £; not more.

2901. That is the loss upon the working?—Yes, that is the loss upon the working; the whole interest upon capital you can hardly look upon as loss, because the wires were all destroyed in the Mutiny, and a great deal of money has been expended on military expeditions, such as Bhootan and Umbela, and so on, much of which is charged to capital.

2902. So that at any rate it would be perfectly unsound to charge the actual capital expended to the capital account?—That would be hardly fair.

2903. With reference to that loss of 40,000 £. a-year, to what do you attribute that?—India is a poor country; that is to say, though the aggregate wealth of India may be great, the masses are poor; there are comparatively few people who can afford to use the telegraph; the Government employes cannot do so largely, the number of produce merchants, the class who find it valuable, is limited; compared with the area the wealth of the inhabitants is not great.

2904. Would you propose to raise the fares?—I have raised them.

2905. And do you anticipate a reduction of that loss of 40,000 £. a-year?—Yes; I think in three or four years the telegraph in India will pay its working expenses, perhaps more.

2906. *Chairman.*] Do you assume it to be a probability that, as the railway lines are completed in India, the Government will put telegraph wires upon them?—They will shift their lines which are in the neighbourhood on to those railways.

2907. So as to bring, for instance, Bombay into communication with Jubbulpore direct, which is not the case at present?—No; Jubbulpore and Bombay are only two points on an unfinished railway which are not in direct communication.

2908. Is there no direct communication now between Bombay and Nagpore?—The rail from Bombay to Nagpore is not completed. There is a good mail road between Nagpore and Mirzapore by Jubbulpore; but no rail nor immediate prospect of a rail communication.

2909. You stated, did you not, that the number of Government messages had been very much reduced?—Very largely.

2910. Is that from an abuse beforehand in the sending of messages by the Government officials?—Not exactly; it was more carelessness and want of consideration; unless the message is really of such urgent importance that it ought to go by telegraph, it is not now permitted to go by telegraph.

2911. That is to say, you restrict the use of the telegraph for Government purposes as much

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as possible, in order that the public generally may have as much use of it as they can get?—Certainly; we endeavour to serve the public, and to obtain from them as much revenue as possible to cover our expenditure.

2912. Sir Charles Bright.] You state that great changes have been made, and immense improvements have taken place during the last three or four years; will you state the nature of them and the locality?—There has been a great improvement in the position of the establishment, the salaries have been gradually raised, the number of signallers has been largely increased, more pains has been taken to get a better class of men, and a check office has been established, which I explained just now; a creation of the last three years. Hamilton's standards have been very largely substituted for wooden posts; a new and excellent class of insulator is now being sent out; the lines have been strengthened and brought closer to the roads, and everything that could be thought of is being done to make them equal to any in the world. The insulators were ordered some time back, but there has been great delay in the manufacture; what the Indian lines require is time.

2913. The old system of insulation, till just before the time when Colonel Douglas left office, was altogether defective, was it not?—I think it was as bad a system of insulating as I have ever seen.

2914. How do you account for that, only having been discovered at so comparatively recent a date?—I think it was discovered when it was first sent out. I do not know why the Government permitted the use of Sir William O'Shaughnessy's insulators; but I fancy that he was their scientific adviser in England, and he thought it the best insulator of the time.

2915. Whereas nothing could be worse?—No, nothing could be worse.

2916. You say that the reason of many of the lines being deficient is, that they were run up in a hurry, as the original lines were destroyed by the Indian Mutiny?—Yes; and because their immense value was then first fully appreciated.

2917. That does not apply to the line between Bombay and Kurrachee, does it?—I do not know anything about the history of that line.

2918. The mutiny would not have affected that line?—I do not know that even the line existed then between Bombay and Kurrachee.

2919. That it was erected afterwards, is a fact I know, but are you acquainted with the route of the line between Bombay and Kurrachee?—Pretty well; I have never seen it, but I know its character very well.

2920. A great portion of it crosses the Runn of Cutch, does it not?—Yes; it is a very difficult route in every respect.

2921. But notwithstanding those improvements were being effected in various parts of India during the last three or four years, (I am speaking of a line prior to your taking office) it does not seem that anything was done to the Bombay and Kurrachee line, in order to improve it?—It has been gradually reconstructed, the whole of it. I think there is a letter of mine before the Committee from the then director of Bombay, in which he says that the whole line is nearly reconstructed, and that he is only waiting for insulators.

2922. We have it in evidence that as lately as the month of March last, messages were still

taking an average of upwards of two days between Bombay and Kurrachee?—I do not think that that can be correct.

2923. It is stated as having been taken from the daily returns by the telegraph department in Bombay?—My recollection is, that when in working order, a message rarely takes eight hours, which we consider far too long; about that time there was prolonged imperfect communication, due to a flaw in the wire, which was concealed by the rust, and only discovered by testing the whole length in small sections.

2924. Mr. Knight stated that there was a maximum and minimum of delivery with reference to the service between Kurrachee and Bombay, from February 1st to February the 12th, of four days, three hours, and 31 minutes, and that a single message came through in a minimum time of four hours. I make out the mean of those to be 51 hours and three quarters?—You cannot take maxima and minima as at all representing a mean, because one maximum will vitiate the whole of the calculation; the maxima are generally due to accidents or other abnormal causes; minima are far nearer the mean; neither can be accepted as more than indications of what can be done and what may happen.

2925. The same statement goes on to say, at Question 2425, "In the middle of January the Indian telegraph rates were considerably increased, and the public naturally looked for increased efficiency; but, instead of this, we believe that the lines throughout India were never in a worse condition than they have been since the increased tariff came into operation;" should you think that an exaggerated statement?—Certainly. I think I know that extract from a newspaper.

2926. Do you consider that the newspapers in India do not supply us with reliable information?—I can only answer for myself; since I have had charge of the telegraph I have found every notice in the newspaper incorrect. The first complaint I saw was of a mutilated message received into India precisely as it was issued, and repeated three times over at my special request ere it was issued. The next was a cypher message sent out to the wrong party, because the whole name of the firm was not given; in this case the real owner assured me it was quite correct, but entreated that I would not reply to the article, because it might seriously injure their firm if it became known that that telegram was addressed to them. We do not reply to attacks in the newspapers; but there is a special clerk, whose duty it is to bring to the notice of the Director General all paragraphs on the subject of telegraphy generally; complaints made either in newspapers or otherwise, are always investigated, and we are always thankful for any information that may enable us to correct faults, and improve the administration; but some time before the extract you read just now was published, I think the same, certainly a Bombay, paper, congratulated themselves that Providence, or someone else, had improved the telegraph to a marked extent; credit was withheld from the department.

2927. In speaking of divulging messages, you said that you did not think that there had been any cases of any importance of that kind?—There were some in Bombay, which were traced with great difficulty, and the parties were very severely punished; but I think it is quite an exceptional thing.

2928. Do you not remember a case to which considerable

considerable public attention was attracted, not more than twelve months since, of two native merchants being punished with imprisonment for bribing the officials?—Yes, this is the same case, I think, as well as I can remember, two signalers, no longer in Government employ, were bribed to cut the wire and take the messages.

2929. Did you ever see a memorial addressed from the merchants at Kurrachee to Mr. Mansfield, the Commissioner of Scinde, complaining of the very fact which was referred to in evidence, of messages being known in the bazaar before they were known at the merchants' offices to whom they were addressed?—No, I never saw it. A signaller is not allowed to leave the office when he is signalling.

2930. The Peons are, are they not?—Yes, the Peons are, but the signaller does not give the message to the Peon, but to the officer in charge, who is an assistant superintendent, or an officer in the department, who looks forward to rising to 1,500 rupees a month.

2931. I think, generally, your statement is to this effect, that considerable improvements are in course of being made, but we have not yet had time to see the effect of them upon the working of the telegraph system?—Hardly. They do show themselves. Whenever a message takes 18 hours between Calcutta and Kurrachee, we call for an explanation; but that is a very different thing from three weeks, as somebody said. I think it was Mr. Walton who said that it took from three days to three weeks between Bombay and Calcutta; I never heard of its being so bad as that at any time; whenever the telegraph is not so much per cent. quicker than the post, a refund is given.

2932. What do you consider a fair time for a message from Kurrachee to Calcutta, now?—Four or five hours; and it would be less if there were no local messages cutting in.

2933. In other words, you have not wires sufficient for your through traffic and your local traffic?—No, not yet; but they are being put up.

2934. When this second wire is through from Kurrachee to Calcutta, I suppose from half-an-hour to 40 minutes would be quite enough as an average?—Yes; we have sent direct to Kurrachee, *i. e.* instantaneously.

2935. Between Kurrachee and Bombay, what time should you suppose would be taken when the improvements are finished?—We should send directly.

2936. The average would be 10 minutes or a quarter of an hour, I suppose?—It would be merely the time to signal, nothing more.

2937. When will those improvements come into effect, do you suppose?—I hope before the end of July.

2938. You said that you thought that the management of the railway telegraph lines would be better left with the railway company; what is your reason for thinking so?—It is almost beyond my province to speak on this subject; I certainly consider it false policy to divide responsibility; why should the rail authorities hand over this part of their working to any one else? a single line of rail cannot be worked without a telegraph; if that administration fail, the rail must fail too; the rail is so completely dependent on the telegraph as to be at their mercy.

2939. You are probably aware that in this country the telegraphs along the railways are worked by the telegraph companies, and that

separate wires are reserved by them for the commercial work, and also for carrying railway messages and signalling railway trains?—Then in that case the Railway Telegraph Company becomes a part of the railway administration under a different name.

2940. Do you see any reason why, supposing a line of telegraph were complete along the railway between Bombay and Calcutta, that telegraph should not be worked by a separate telegraph company, the railway service being done as in this country by the telegraph company as well as the transmission of public messages?—Then you divide the responsibility; the railway people can do their own work, or certainly they ought to do it more satisfactorily than if they got some one else to do it for them.

2941. But a railway company is scarcely suitable, is it, for carrying public messages; it is a different trade, is it not?—You have a special and separate establishment, and can have special wires for the public; but to give the working of the railway telegraphs to a separate administration, is about as wise as to hand over the police, the working of the locomotives, or any other branch of their business; you may have special lines for the purpose.

2942. You think that the system which exists in this country of having wires upon the same poles along the railways for railway purposes and for telegraph purposes would not suit so well in India?—All the lines in England are double, or chiefly so; but where there is a single line of railway, then the whole of the safety of the line is in the telegraph; you cannot move without a telegraph.

2943. Is it not better, therefore, that the telegraph should be worked by persons specially trained to it, and that it should not be left to the care of railway porters?—It is not so; they have got a separate establishment, and a separate superintendent for telegraphy only.

2944. Supposing such a line of telegraph were finished between Bombay and Calcutta, do you see any objection to the working of it being in the hands of a private company?—None whatever, beyond what I have mentioned.

2945. Mr. Marsh.] You say that there is a line to Rangoon; is that fixed upon the trees or upon posts?—On posts, unfortunately; the elephant grass and creepers soon reach the wire and cause interruptions; and that, too, at the season of the year when those malarious tracts are deadly. Just as I left Calcutta, my deputy, Major Murray, started to inspect this line, and to endeavour to devise some means for ameliorating or removing those difficulties.

2946. Would there be any great difficulty in continuing that line to Singapore along the coast?—Enormous practical difficulty, from the wild nature of the country.

2947. Is there a line of telegraph by land being constructed at present between Kurrachee and the head of the Persian Gulf by Bushire?—It is under consideration. I met Colonel Goldsmid at Madras, and we had a talk upon the subject; he was there on his way to the Governor General to try and induce him to support a direct line from Kurrachee, avoiding the Gulf altogether.

2948. That would be very preferable, I suppose, and could be done?—It is would always be liable; in other respects it would be preferable to a cable, to being injured by mischievous people among the wild tribes.

Col. D. G. Robinson.

15 May 1866.

Friday, 18th May 1866.

MEMBERS PRESENT :

Sir Charles Bright.
Mr. Brooks.
Mr. Childers.
Mr. Crawford.
Mr. Laird.
Mr. Marsh.

Mr. Moffatt.
Sir Henry Rawlinson.
Admiral Seymour.
Mr. Stansfeld.
Mr. Weguelin.

ROBERT WIGRAM CRAWFORD, Esq., IN THE CHAIR.

JOSEPH D'AGUILAR SAMUDA, Esq., a Member of the House ; Examined.

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2949. *Chairman.*] THE Committee wish very much to have the benefit of your advice and information as to the effect produced upon the cost of working steamers by increasing the rate of speed. It appears that, according to the present contract between the Government and the Peninsular and Oriental Company, the company are bound to perform the voyage from Suez to Bombay in 312 hours. The distance being 2,972 miles, which gives an average speed of $9\frac{1}{2}$ knots an hour. If it were proposed to increase that speed to 11 knots an hour, what should you consider to be the proper equivalent to be paid to the company in consideration of the extra speed thus given by them to the public?—That would entail a consumption of 7,800 tons of coals, if the voyages were performed weekly, and a cost of about 27,000*l.* in money. I take it in this way: 11 knots would require 60 tons of coal per day, and the present consumption of coal, as it actually is taking place, I am informed, is 44 tons a day, to produce $9\frac{1}{2}$ knots. The difference by that calculation, taking into account the reduced days of voyage, would be 150 tons per voyage, and 150 tons per voyage, multiplied by 52 voyages, will give 7,800 tons a year; therefore, on the Indian side, you will have to increase the cost by 27,300*l.* for coal. I have also taken on the European side to increase the speed to 12 knots an hour, and running the same number of voyages, you will require to increase your consumption of coal 169 tons a voyage, or 8,800 tons in the year, or 15,800*l.*, that is between Marseilles to Alexandria. That would give a total of 43,000*l.* a year additional for coal, if you accelerated the speed from 10 knots, which is the present speed on the European side, to 12 knots, and from 9 or $9\frac{1}{2}$ knots, which is the present speed on the Indian side, to 11 knots; and a voyage weekly, each way, that is, 52 complete voyages out and home, or 104 trips. Then I have taken 36 tons per day as the quantity which they are burning on the European side, going at 10 knots an hour, which I am informed is their quantity. And I would call the attention of the Committee here to the reason why I have suggested a difference of a knot an hour in the two services, and so small a difference in the quantity of coal for the different speeds. It is a generally well known thing that coal deteriorates very much indeed in hot climates; it is difficult to keep it so useful and so good as in Europe; and I have made an al-

lowance that you must require one-fourth more coal to do the same quantity of work in India. The figures given to me by the Peninsular and Oriental Company, of what they actually find is the case, exceeds that one-fourth; but I think that one-fourth is a very fair allowance, and I think you must not attempt to get those differences quite exact, for this reason: that there is a very great difference between using Welsh coal, and using Newcastle coal; the difference is as much, probably, as 25 per cent. In the case of the vessels on their near home service, they no doubt are all supplied with Welsh coal, but I should imagine (I do not know it for a fact) that on the Indian station they, occasionally, are obliged to take ships with North country coal, and that may quite sufficiently account for the fact being, as given to me, that it now exceeds the allowance which I have made on the Indian station.

2950. *Mr. Marsh.*] Do you know that at Ceylon they have almost entirely north country coal?—I do not know what they use there. It would certainly be wiser if they could get it, to use all Welsh coal, but I can imagine that it is almost an impossibility; they are obliged to take ships from different parts, just as they are able to get them, because they want such a large quantity.

2951. *Chairman.*] You mean that if four tons of coal will do the service of four tons here, four tons of coal in the East will only do the service of three tons?—Exactly. I have looked at the matter in this way: What are the present speeds, and what could be obtained; and when I have suggested what could be obtained, what would be the means that would be necessary to call upon a company to provide to obtain those results, and the expense consequent upon it, of vessels and everything of the sort. I should propose, not only as a good service, but as the greatest that you could possibly recommend with the present amount of experience, that 12 knots might be fixed for the accelerated speed on the European side, and 11 on the Indian side. In order to do this, I should propose to put upon the Indian side vessels of 2,400 tons burden and 500-horse power, and those vessels would burn about 60 tons of coal per day; those vessels would have the power of carrying 350 tons of cargo, in addition to their stores, and 550 tons of coal; that is, nine days' coal. That would require the vessels to stop at Aden, and I should almost fancy that on the whole

whole it would be more advisable that they should stop at Aden; but if it were deemed so desirable that everything else should give way to their going the whole journey without stopping at all, they would require to carry 800 tons of coals; that is to say, they must carry about two days more than is necessary for the expected length of the voyage, and they would have to abandon that quantity of cargo. Therefore that would reduce their cargo to 100 tons. Practically, if you insisted upon the vessels making the journey without stopping at Aden, you would have to abandon the cargo.

2952. And reduce the earnings of the ship simply to mails and passengers?—Yes, you would only be able to take 100 tons of cargo instead of 350.

2953. Sir Henry Rawlinson.] There is the difference of being heavily laden?—That you would have to provide for again, but it would be no profit to you. That would be easily provided for by building vessels on the plan which we have adopted in some cases, viz., of building them with double bottoms, and when the vessel becomes too light from the consumption of coal, substituting water in between those double bottoms; ballasting the ship with water when the quantity of coal was nearly burnt out, would be a mere question for the comparative increase of subsidy owing to the decreased power of earning in the shape of cargo. The same vessels would be required in both cases.

2954. Chairman.] In the next place, judging by the experience which we have of the increase in the amount of the mails; 100 tons might in the course of a long contract be found to be no more than sufficient to accommodate the mails, especially if provision had to be made for a sorting room on board?—I do not know about 100 tons for mails, that seems a very large amount.

2955. We have had evidence of the mail sent to Australia in November last, amounting to 106 tons?—I was not aware of that; you will understand that I am alluding to dead weight, and you would have with those 100 tons a great amount of space for light things like mails; but you would not have the power of putting more than that weight with the displacement of the ship, which I have provided for, and the displacement of the ship regulates the quantity of coal that is burnt. Then on the European side I should also propose to use vessels of the same size, namely, 2,400 tons, and of the same power; they have a much easier task to perform, as their journey is only 1,500 miles. Therefore, there is no difficulty in carrying their coal. On the European side, going 12 knots an hour, the consumption of coal would be as nearly as possible the same as on the Indian side going 11 knots, the consumption of coal on the European side would be 58 tons a day. Reviewing the ship which the company possess for performing this service, it occurs to me, that for the Indian side the "Simla" is the only one that I should retain, and I think that the "Simla" with new boilers would be capable of taking her place as one of those ships. Then five new ships would have to be added, and the cost of those five ships with their engines would be 110,000 £. each, and that would involve 550,000 £. On the European side I should propose to use the "Ceylon" as she is. I should propose to put new engines in the "Golconda" and the "Moulton," with a cost of 33,000 £. in each case; and I should propose to

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lengthen the "Carnatic," and to put new engines into her at a cost of 63,000 £.; so that 130,000 £. would have to be spent on the European side, or a total of 680,000 £. Therefore, I make it that 680,000 £. will have to be spent to enable this increased velocity to be attained and to be maintained.

2956. Do you consider that six ships of that power would be sufficient to keep up a weekly communication with India?—I think they would; if six vessels were used, each vessel would have a 13 days stay at Bombay, and six days at Suez, and I think that is enough; seven vessels probably might be better.

2957. Do you mean six ships on the other side?—Yes.

2958. How many on this side?—Four on this side.

2959. Mr. March.] That is only from Marseilles?—Yes, that is only from Marseilles; I have not taken account of the Southampton line at all; and have left that out expressly, because I do not think it would pay to make the alterations, and to accelerate the speed upon the Southampton line.

2960. The speed is not so much required on that line?—I do not think it is; I consider that they have got the mail route marked out to go through France, and any advantage that may result from the ships carrying cargo on the Southampton route, would, in my opinion, be better than increasing the speed.

2961. Chairman.] What time do you suppose would be required to enable the Peninsular and Oriental Company, or any other company (provided always that money was in hand, and that no finance company was to be called to the aid) to provide those ships?—At the very least 18 months.

2962. And the additional time of putting the ships on the station in India?—Yes; I mean to provide them from the builders; if they gave the order for them to-morrow they could not have them in a fit condition to go to sea for 18 months at the very least.

2963. You would consider it proper, would you not, that any company obtaining a contract under such conditions, should have the contract in the nature of a lease, with sometime to run?—Yes, no doubt; because those vessels, if they happened to be thrown upon their hands, would be even more difficult to make profitable employment of than their present vessels.

2964. What should you consider to be a fair time for such a contract, having regard to the large outlay which you have suggested?—Upon that point my opinion would not be perhaps so valuable as that of many Honourable Members on this Committee, but I should suppose about seven years.

2965. I mean with reference to the probability of repairs which such ships would have to undergo in the course of their service, and in that respect your experience would be useful to the Committee?—But I look upon it more in this way, that if those vessels were ever diverted from the service which you engage them for, and went about seeking employment, in all probability they could only obtain it by submitting to a very large amount of depreciation upon their original cost; and if they had had seven years employment on one service, the Company ought, I think, by prudent arrangements of commerce, to have laid by a sufficient sum to meet that depreciation, which

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would enable them to do so, with a fair probability of avoiding loss. If you took those ships, and set them adrift 12 months after you have started them, it would in all probability result in a very great loss to the company before they could fall upon their legs, and find another employment for them.

2966. From your knowledge of the vessels which the Peninsular and Oriental Company are employing at the present moment in the Eastern seas, do you think that any of them could be used for the purposes of this Indian Mail from Suez to Bombay, at a rate of speed in excess of the present speed, but not so high as you have been contemplating?—I think that with some slight modifications and alterations, they could be employed in excess of their present speed.

2967. To what extent?—I should have thought a knot an hour.

2968. That would be $10\frac{1}{2}$ knots instead of 11?—I fancy myself that they only go 9 knots, instead of $9\frac{1}{2}$; but whatever it is, it might be a knot more, if you take the papers that have been given in, I will tell you what I refer to. In the papers of the Select Committee on Communication with India issued in April last, at page 16, the speed of the mails is given for the year 1865, and there I find that the average for the year is given between Marseilles and Alexandria at 10 knots; from Suez to Bombay at 9 knots; and from Suez to Calcutta at 10 knots.

2969. Under the contract, as it at present stands, and which was modified in the month of February last, the vessels are bound now to perform their service, not at a rate per hour, but to complete their voyage within a certain number of days. And the result, of that which I stated in my first question to you was to bring the service between Suez and Bombay at $9\frac{1}{2}$ knots?—Yes. But then I find by another paper put in by Mr. Hill, that the service is stated in this way: the contract time of 10 knots, reduced for deviations from the straight line of half knot to, say $9\frac{1}{2}$ knots, would give 14 days 2 hours, and that the ships have performed the voyage in 13 days, 23 hours, and 53 minutes. They really have performed the voyage 7 hours less than the contract time; that makes it $9\frac{1}{2}$ knots; but still I fancy there is a further allowance in that which I do not see, because it does not work out 312 hours, the contract time, and 3,000 miles at $9\frac{1}{2}$ knots an hour, makes 13 days; but the time, as given by Mr. Hill, made 14 days, and that is a part of the case which puzzles me. But be that as it may, vessels, such as their new ships, the "Carnatic," the "Rangoon," the "Baroda," the "Delhi," and the "Golconda," are vessels which ought to have been able to have done at least 10 knots an hour.

2970. The Committee may consider it to be your opinion that, in the present state of nautical science, the contract speed of $9\frac{1}{2}$ knots an hour, on a great main line of communication, is hardly up to the standard of the present day?—I think not; I think that you ought to have the best service you can get, and this speed appears to me to be too low. But of course, in making that observation, I wish to call the attention of the Committee to the fact, that in getting the faster service, it involves a great deal beyond what has been done previously. I do not know that any contract has ever been given yet so high as 12 knots an hour. The contract speed obtained by the West India Mail Company is $10\frac{1}{2}$ knots; I do not know what their contract requires of

them, but they obtain $10\frac{1}{2}$ knots. The contract speed obtained by the Peninsular and Oriental Company on the European side I have known myself for a long time to have been about $10\frac{1}{2}$ knots, from the observations which I have taken of some of the vessels that they have running now, without going into the whole average. Therefore there could be no difficulty in that being maintained there.

2971. Are there any other elements which would enter into your calculation of the increased cost in consequence of the increased rate of speed?—There are other elements; but I have not taken them into my calculation because they do not come exactly within my own province. But there would be some slight additional cost in maintaining those large ships. The wear and tear, of course would be great, and the interest of money, and the depreciation that would follow would be with reference to the outlay made; but the principal additions are what I have stated to the Committee.

2972. The extra cost due to the item, coal, would not be the only additional expense?—No, not the only element; but then you would get, of course, a very considerable advantage by increasing the size of the ships, because it is comparatively easy; and I ought to call the attention of the Committee to that. It is comparatively easy to get the speeds we are talking of in smooth water and under favourable circumstances; but when you work in all weathers, in bad weather as well as in fine weather, and under all adverse circumstances, the engines and the ships not being up to the highest state of perfection, sometimes the bottoms of the ships being rather dirty, and necessarily so from not being able to get time to go into dock, and sometimes the boilers, not being in the very highest state of perfection, you must make in practice a very large allowance from that which the ship is capable of doing in smooth weather. And it is practically the case that the larger the ship the more nearly the general average will approach to the highest rate of speed that you can get out of the ships. With small ships the difference will become very much greater in bad weather than it would be with large ships.

2973. Which do you consider to be preferable, the screw or the paddle?—In this instance I should use a screw. The variation of the coal is so very great, and more especially if you at any time thought it necessary to insist upon a vessel going past Aden, that I think a screw on the whole would be better.

2974. Mr. Marsh.] The speed, I presume, is irrespective of the four months of the monsoon?—No, I make this average to include the four months of the monsoon.

2975. In other times of the year they would go more knots an hour?—Yes, they would have then to go faster.

2976. You state that the coal consumed by the greater speed is very much more, and the consequent expense is greater. Is not there some expense caused by the extra wear and tear of the machinery, or do not you calculate that?—No, I do not calculate that. I think that with vessels and with engines constructed originally to give out that speed, you ought not to have a greater wear and tear, because you ought to work those engines and the vessels within the power that they are capable of, and very considerable within it. For instance, to go 12 knots we

we should require to exert about 1,800 horse power, that is to say, 1,800 indicated horse power, and the engines ought to be capable of exerting 2,500 easily. And, therefore, they are so far within their power that you ought not by putting any excessive strain on them to produce any excessive amount of wear and tear.

2977. That might occur against the monsoon occasionally, might it not?—No, I do not think so. In the case of the monsoon you would have to reduce the speed of your ship, because you could not possibly navigate at such speed or exert such power as you would under the ordinary circumstances of moderate weather.

2978. She would be too wet, would she not?—Yes; you could not drive her; she would be too wet.

2979. You have stated to the Committee that you recommend vessels of 2,400 tons for the Indian line. Have you ever thought of the long stretch from Galle to Australia, of 3,300 miles?—The service that I have been speaking of is 3,000 miles.

2980. What ship would you recommend as the smallest ship that could be used?—That would depend upon what speed you wanted to go.

2981. At a speed, say of 10 knots?—Those same ships would be about the thing.

2982. To go nine-and-a-half knots you would not recommend anything under 2,000 tons?—No, certainly not.

2983. Are you aware that they go now with ships of 1,400 tons?—Then that is too small.

2984. You would recommend certainly not less than 2,000 tons for the safety of the cargo?—No; but my recommendation has reference to the convenience of passengers, not to the safety of the cargo.

2985. You know that for a vessel of 1,500 tons they must carry coals on deck?—I think they ought to be prohibited carrying coals on deck. What I am speaking of is with regard to getting good average speed; that is what you want; ships of 1,400 tons may be safe enough to carry coal for 3,300 miles, but I do not think you can profitably employ any ships which are much less than 2,400 tons or 2,000 tons if you want to go at anything like speed of the present day, 10 knots.

2986. If you employ a vessel of 1,400 tons, you must carry coal on deck?—I am not prepared to say that you could make a ship of 1,400 tons to go 3,300 miles, and to carry coal for that distance. With regard to the present speed, I was reading over the evidence which was put before the Committee, in which I noticed that it was proposed to use vessels of about 1,500 tons and 450 horse-power, and it was represented to the Committee that such a vessel could carry 200 tons of cargo, and 400 tons of coal, and that that would enable the ship to make the voyage between Suez and Bombay, without stopping at Aden, at the rate of 12½ knots an hour. I say that that is utterly impossible; and to satisfy the Committee how very incorrect it must be, I have taken out the actual results of a paddle-wheel vessel, which I built of the same beam, a 36-foot beam, but 300-feet in length instead of 245, and consequently giving her very considerable advantages of carrying power, and that vessel would only be able to carry five and three-quarter days' coal if she went at 12 knots an hour, or four and three-quarter days coal if she went at 12½ knots in India; and therefore it is impossible that you could have a vessel

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which was 55-feet shorter than this, with the same beam, carrying coal that really required to be 12 days' coal.

2987. To go, we will say, nine knots an hour, from Galle to King George's Sound which is 3,330 miles, could a vessel of less than 2,000 tons do that and carry passengers and a heavy mail, but not cargo?—I think that it might be done with a vessel of 1,600; indeed you may take it for certain it could be done at that speed.

2988. Without carrying coal on deck?—Yes, I do not consider that coal on the deck ought to be allowed under any circumstances.

2989. Sir Henry Rawlinson.] In the number that you have given of vessels that would be required, and the time for stopping at Bombay and Suez, do you allow any margin for accident; do you allow any extra vessel?—The time is the circumstance in which you get the allowance; but, as I stated to the Committee, I think that seven vessels would be better than six; but if you had six vessels you would have a stay at Bombay of 13 days, and a stay at Suez of six days; if you had seven vessels you would have a stay of 13 days at each place, and therefore you would have one vessel that could take the place of the others under all circumstances.

2990. Admiral Seymour.] In order to get an average of 12 knots an hour do you calculate that you must go 14 or 15 knots at the measured mile?—To get an average of 12 knots you ought to get very nearly 15 knots at the measured mile; 14 would do for all ordinary seas and all ordinary circumstances, but if you got 14 knots at the measured mile you ought to be extremely careful to have such an understanding that the moment the boilers got the least bit worn they should take them out and substitute others; because the way in which you fall off very much in your speed is this, vessels are tried at the measured mile with perfectly new boilers, and with a pressure of 25 pounds to the inch, a very fair and reasonable pressure with boilers in that state, and if they go 14 knots at the measured mile, they would very safely under similar circumstances insure you 12 knots at sea; but after they have been out at sea for some short time, and the boilers get worn and weak, they reduce the pressure on the safety-valve from 25 pounds to 14 pounds, and then you cannot, of course, keep up a corresponding speed.

2991. Mr. Marsh.] Are the boilers tried with salt water at the measured mile?—Yes, they are generally tried at Stokes Bay, that is salt water.

2992. Mr. Laird.] You stated that you think you could adapt the present vessels to go a knot faster, would that be by extensive alterations?—I fancy that the alterations would have principally reference to the boilers, and probably the engines. If they had new boilers they would bear a little more pressure, I think, and many of those vessels ought to go at a knot an hour faster.

2993. The only alteration would be in having new boilers of a larger size?—Yes, I think so; certainly that would be so in the case of those new vessels which I have referred to.

2994. That would involve an extra consumption of coal, would it not?—That would involve an extra consumption of about 14 tons a day.

2995. Mr. Stansfeld.] Do you happen to know what was the speed of the "Persia" at the measured mile?—I think it was 14 knots; I am not quite certain; I do not know that she was ever tried at the proper measured mile; they do not generally

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generally try them in Scotland at the measured mile.

2996. She made in 1861 12·9 knots in her voyages on the average of the year, as I understand?—I was not aware of that; that is a very high speed; she is a very large ship; indeed she is a vessel of 1,000 horse power, and I believe her consumption of coal is something like 140 tons a day; still I think there must be some in-

accuracy in the statement of her having averaged 12·9 knots through a whole year.

2997. Mr. Marsh.] The "Scotia" is still larger and still faster, is she not?—I think she is very nearly the same.

2998. What is the "Atrato"?—The "Atrato" is 800 horse power. I do not think she is quite as large as the "Persia." She is about 3,300 tons burthen, I think.

CHARLES WELLINGTON HOWELL, Esq., called in; and further Examined.

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2999. *Chairman.*] You heard the evidence that was given the other day by Mr. Knight: do you wish to make any statement with regard to that evidence?—Yes, I would desire to make a statement upon several points connected with the evidence which I heard.

3000. The Committee would wish to limit the inquiry as much as possible now, and perhaps if you can confine yourself to the refutation of facts, and not go into matters of opinion, it would be very desirable?—For obvious reasons I desire as much as possible to state facts only, and to support those facts by vouchers when I can do so. The first point which I noticed in Mr. Knight's evidence was with regard to the speed upon our Suez line; there is still a certain conflict of evidence upon that point. The number of hours we are allowed between Suez and Bombay gives out the speed of nine and a half knots per hour. Mr. Knight says that we only do eight and a half knots; but a return put in by Mr. Frederick Hill, of the Post Office, of the actual average performance between Suez and Bombay during the years 1864 and 1865, shows that we did it in two hours and seven minutes under the contract time. The reason why there is some apparent discrepancy between nine and a half knots, which is the contract time, and the actual performance, is this: that in Mr. Hill's return account is taken for the allowance given to us during the five months of the south-west monsoon. If that return of Mr. Hill's were referred to, it would be seen that the average length of the voyage from Bombay to Suez, inclusive of the stoppage at Aden, was 13 days 22 hours; the average stoppage at Aden was eight hours 36 minutes; the average length of the voyage from Suez to Bombay, exclusive of the stoppage at Aden, was 13 days 13 hours and 24 minutes. The contract time of 10 knots an hour, reduced to an estimated equivalent of 9½ knots, by allowing for deviations from straight lines in days and hours, exclusive of the stoppage at Aden, 13 days exactly, but then there is the allowance for the monsoon voyages which is brought into the general summary of the foregoing statements, and the general summary shows that we have, during the two years, which are comprised in this account, performed the work two hours and seven minutes on the average under the contract time.

3001. Under your present contract you are bound, are you not, to make the voyage in 312 hours?—That is so.

3002. In settling up with the Government in respect of that 312 hours, will you be allowed the benefit, so far as the average is concerned, of the additional time in making the voyage from Bombay to Aden in the monsoon?—In the monsoon months we shall get that benefit.

3003. How often do you make your settlement with the Post Office?—We have not yet made a

settlement with them under the agreement of February last; the returns are not yet received upon which a settlement can be made. The payments in respect of the mail contracts are made to us quarterly, namely, on the 31st of December, 31st March, and so on; but the returns are not yet received from the East, to enable us to adjust a premium and penalty account with the Post Office under the new arrangement.

3004. That is to say, each voyage is aken separately?—Yes, each voyage is taken separately in adjusting the premium and penalty account; and with regard to the suggestion that these things are rather comfortably managed between us, I may say that we find the Post Office exceedingly hard taskmasters in the matter. I could give cases if it were necessary; one of the very ships (the "Massilia") which the last witness referred to, left Southampton on the 4th of January immediately preceding the loss of the "London," as you are aware; she did not encounter the same gale, but she met with very severe weather, that kind of weather which made the attainment of regularity difficult—as between Southampton and Gibraltar. They had to stop four hours to repair the paddle-wheels, owing to the nature of the sea that she encountered. Between Gibraltar and Malta she had average weather, and she then exceeded the contract speed by a very considerable degree, showing that there was nothing wrong with the vessel. Between Malta and Alexandria she met with weather that reduced the speed of the vessel to four knots per hour, and notwithstanding her high capability, no more could be got out of her; in fact, it was not safe to drive her at a higher speed. All those circumstances combined caused us to be about 26 hours beyond the time allowed in the contract, four hours of which, as I have stated, were consumed in repairing the paddle-wheels; and yet the Government, to our surprise, fined us for 24 hours' delay, although we sent in vouchers for the condition of things which I have described.

3005. They exacted their pound of flesh?—Yes, they exacted their pound of flesh. We remonstrated, and sent in a second letter in which we pointed out that we had to stop to repair the paddle-wheels, and that when the ship was not affected by severe weather she performed her work well, but they have confirmed their first decision, and have imposed a penalty upon us. I cite this case simply as showing that there is no ground for the insinuation that there is anything like a comfortable adjustment of these matters between the company and the Post Office.

3006. In the event of your making a voyage with a very favourable wind the whole way, and keeping well within time, you do not make an offer of that to the Government on the other hand?—No, but we do not obtain a premium unless

unless we are 24 hours within our contract time; and to give you a case, the "Tanjore" left Southampton about three weeks after the "Masilia." In the Post Office returns, she is made to start from Southampton at 50 minutes after two o'clock. Our captain makes her to start 55 minutes after two o'clock; in the log book the consequence is, there is five minutes discrepancy between us, and curiously enough, upon that five minutes hangs the question whether or not we are entitled to a premium; we are admitted by the Post Office to have been 23 hours and 55 minutes under our time, but because there is a discrepancy of five minutes between us, they withhold the premium. I think these two cases will do away with the effect of the insinuation that we get favoured in these matters. I find a statement in Mr. Knight's evidence, that he believed I said that the Peninsular and Oriental Company did as well in point of speed as the Cunard steamers. I believe, on reference to my evidence, it will not be found that I said that, or anything approaching to it. I admit, of course, most freely, that we do not attain the rate of speed that they do in their best voyages; but there is another consideration with respect to the tables which have been put in; you will find a great variation between their best voyages and those which are not so good; and we say, that if you extend the same variation to our work, which is three or four times as long (I am not speaking now exactly as between Suez and Bombay), every difference between our best and worst is accounted for.

3007. One of your voyages embracing Japan and Australia, embraces a service, as we have been informed, of 16,000 or 17,000 miles?—Over 18,000 miles, and that is without including much which has an indirect bearing upon that performance; the attainment of regularity depends also upon other results; for instance, on the arrivals of ships outwards at their proper time and station, so that both directly, and indirectly, there is little less than 20,000 miles of navigation involved in a complete voyage. There was a return put in the last time the Committee met, of the performances of the "Persia." If I were to take particular vessels of ours, the "Simla," for example, which has been referred to this morning, I could show a very much higher rate of speed than the average performance of all our vessels. With regard to the statement that storms are unknown in the Indian seas, I could quote Mr. Knight's own paper over and over again, for cases in which we have been subjected to most violent storms. We also stated that in our various contracts, there have been no penalties; there are very many penalties, and some of them of a very severe nature. We are always under a very heavy penalty for not having a vessel ready to start upon her appointed day, and during the 25 years that we have worked the Government contracts, we have never incurred that penalty. Reference was made to a paper which showed an excess of premiums over penalties. I think the witness must have had before him a return made to Parliament relating to the Australian service, in which it was shown that we had obtained on that line premiums in excess of the penalties, but that of itself is inconsistent with the statement that we never incurred penalties, as if no penalties were inflicted there could have been no excess. Then the statements I put in with respect to the price of coal were impugned.

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The witness stated that he was under the impression that the price of coals at Bombay during the last five years would be from 20 to 22 rupees, or 40 to 44 shillings a ton. The returns I put in for the last five years, gave an average, I think, of 35s., so that I do not exactly see how my statement can be impugned; in fact, the witness has made it higher than the rate that I put in, showing this, that we have succeeded in laying in our coals at Bombay at a cheaper rate than the market price.

3008. Can you tell me what the quantity of your coal is annually delivered to you at Bombay?—No, I could not say at Bombay.

3009. The quantity is so large that you would not consider it safe to rely entirely upon the means of the Bombay market to supply you?—No, we should never think of relying upon supplies to be obtained in the local market. The coals which vessels take out are in great measure shipped as ballast. Vessels going out to bring home cotton take coals which they sell to the first comer in the market, and the local prices are affected by the abundance or scarcity of coals of that description. But we select all our coals at the pit's mouth. We keep an inspector at a sufficient salary (generally one of our retired captains), at each of the principal loading ports, and there is not a single ton of coals shipped for the use of our company which is not put on board under the inspection of our own servant.

3010. And have you reason to be satisfied with the result of that supervision?—We have found this, that although we have to pay a considerable salary to the officers so employed, it is an economical arrangement. We have had fewer occasions to go to the contractors with complaints of the quality of the coals they have shipped, since we have adopted the system of keeping our inspectors on the spot.

3011. Do you make your contracts with the shipowners generally for coal deliverable at Bombay at a price?—Yes, we do. I have here one of the very papers which are filled up at our Board, when we open tenders for a supply of coals. I take down the prices, and I will mention the names of the parties to whom we apply for tenders. Messieurs Austin Brothers, J. Allan & Sons, J. Burness, Gillespy & Scott, G. & A. Herring & Co., Hickie, Borman & Co., Higgin & Co., Jackson & Sons, J. M. Mackay & Co., Pirie & Co., Stringer, Pembroke & Co., and a number of others.

3012. Your object in reading that paper is to show that, in your own interest, you take every possible means of getting your coals cheap?—Yes, and to prove how successful those means have been in their results at Bombay, the price that Mr. Knight has put in as the price at that place goes to prove that the price at which we have laid our coals down at Bombay, for the average of five years, is lower than the rate of the local market, I do not dispute that perhaps 22 rupees, that is 44s. per ton, was the average market rate of coals to be bought alongside at Bombay; but I have in my hand, "The Times of India," of the latest date received, in which the price of coals alongside the ship is given at 42 to 44 rupees; that is 88s. per ton; and I have it from another source that business was done at 45 rupees, that is 90s. a ton. This is, of course, rather an exceptional condition of things; but, going back for the past six months, the price comes out at something very much in

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excess of the average of the five years which I have put in.

3013. *Admiral Seymour.*] Have any of your vessels, on their way out to China, ever taken any Labuan coal?—Yes, they have done so at Singapore whenever the Labuan Company have been able to supply us; I may mention, further, that when that company commenced operations we were promised to have coal at a very low rate, they expected to be able to supply us with coals at Singapore at about half the rates at which we were laying down coals from England; but what with the cost of labour at the mines, and the difficulty and expense of transport, they at last came to us, and begged as a favour, that we would take from them any coals they could supply us with, at the same rates as we were paying contractors for English coals, and we took all the coals that they could bring to us at those rates.

3014. Is the quality good?—The quality is good; it burns away, perhaps, somewhat fast, and, that remark applies to what I may call native coal, as distinguished from English coal, all over the world.

3015. *Chairman.*] Do you use any Burdwan coal?—No, we used some very many years ago, but with the same result: if we were to fill up our ship with Burdwan coal we should find, before we had got to the end of our voyage, that we had exhausted the bunkers.

3016. *Mr. Marsh.*] You use Australian coal, do you not, on the Australian journey?—Yes, we use it from Sydney to Melbourne and King George's Sound; but we do not send Australian coal to King George's Sound for use on the long run between the Sound and Point de Galle.

3017. *Chairman.*] Do you send coal out to King George's Sound?—Yes, we supply King George's Sound entirely from England.

3018. *Mr. Marsh.*] The Sydney coal is much cheaper, is it not, than what you could send it for from England?—Yes.

3019. Do you get it in China at all?—No, not to any extent; we gave our agent at Sydney a discretionary power to send up Sydney coal at certain rates; those rates not to exceed the price we were paying direct to Shanghai, but he was not able to do business for us on those terms.

3020. Sydney coal raises steam very well, does it not?—Yes, it does.

3021. *Chairman.*] Have you anything else to say with regard to coal?—It was stated that there appears to be a discrepancy between the prices which I gave and the prices given by the Chairman in his speech at our proprietary meeting. The prices given by our Chairman included our rates on this side of Suez also. When he stated that our coals in a certain year cost 51s. 7d. all round, that embraced all that we took on board at Southampton, where, of course, they are laid in at a low rate—about 18s. a ton. Then a very grave statement was made by Mr. Knight, namely, that the accounts of the Company are made up to conceal our profits, and that in India the statements of the Company are not believed. Upon these points I must ask a little indulgence. There commenced in 1863 a series of articles in one of the Bombay papers, "The Times" of India, attacking the Company, and stating, among other things, that, "having a monopoly of the most valuable passenger traffic in the world, they maintain their charges at double and treble the rates of any other company in existence." The returns

which I have put in disprove that. It is also stated that taking the number of our ships and valuing them at 26 l. per ton, a result is arrived at which differs entirely from our capital. The writer says:—"The inference is irresistible that they have built these fleets and dockyards, and accumulated the vast wealth of which they stand possessed, by *concealing profits*" (that is put in italics), "and by annually dividing no more than a fraction of them." I do not desire to take up the time of the Committee by quoting other paragraphs of the same nature; but it is asserted, among other things, that our "Imperial Palace, in Leadenhall-street," which, no doubt, many of the Committee know, must be worth at least from 60,000l. to 100,000l. That is a sample of the statements that were made. I quote another, "We pass on to Singapore to find the Company owners of a dockyard with its usual conveniences and appurtenances that a third-rate power might be proud of." That is an absolute statement made, and one of the local papers pointed out that there certainly must be some mistake here, that it was not so, but the editor of the paper making that statement returned to it, and said that he maintained the statement that we do possess this dockyard; and he quoted as his authority poor Albert Smith's book, "To China and Back," in which he finds this passage, "Sunday, 15th August 1858.—To breakfast with Captain Marshall, at his bungalow Captain Marshall's bungalow is charmingly situated on a hill, overlooking the magnificent harbour and docks, now being built by the Peninsular and Oriental Company." Now, I have to inform the Committee that the Peninsular and Oriental Company never had at Singapore anything approaching a dock. They have there certain shore-frontage, about five miles away from the city, at what is called the "New Harbour"; and the shore being very steep, they were enabled to construct jetties, which permitted their vessels to lie alongside, and take their coal on board without employing barges; and we have, as at other places, coal sheds there to protect the coal, but we have not, and never had anything approaching what has been described in this newspaper. I give this as another specimen of the exaggeration pervading the statements made.

3022. *Mr. Laird.*] What is the value of the establishment that you allude to?—The amount that we have expended at Singapore is short of 6,000l. I may mention that that property is of no value excepting for our own purposes, or the purposes of some other company, which might have to carry on a similar business to ours in case we were off the line.

3023. *Chairman.*] Do the Messageries take in their coal at your wharves?—No, I do not think that they take in coal at Singapore; Saigon is their chief coaling station on their way to China. I would also refer to another point, upon which we have had three different statements: namely, the cost of the Bombay line. I stated in my first day's evidence that the cost of this line was 2s. 7d. per mile. It was stated in the papers, put in by the Post Office, that it was 80,000l. which will come out at 4s. 6d. per mile; and it was stated by Mr. Knight that, on examination, he found that it came out at 6s. 2d. per mile. Our Bombay contract was taken in 1854, the year following the general contract and under which we are now working

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ing the postal communication with Calcutta and China; and the rate at which that was taken was 6s. 2d. per mile. The period of that contract has long since expired, but we are still working it, subject to a twelvemonth's notice to be given on either side; and the price has been reduced in several ways. On reference to this statement which I hold in my hand, which I had prepared for the Committee of 1860, I find it stated, "The Parliamentary Committee of 1851 had reported that this service" (that is between Bombay and Aden) "in point of economy, the comfort of the passengers, and the requirements of trade, would be performed to greater advantage by a private company than by the vessels of the Indian navy;" previous to that it had been carried on by vessels of the Indian navy, the Home Government contributing to the cost of the service an annual sum of 50,000 *l.*, the Indian Government bearing the balance which varied from 55,000 *l.* to 70,000 *l.*; and in one year it came up to 130,000 *l.* This Company then took a contract for Bombay and Aden only at the same rate per mile as their main contract, namely, 6s. 2d. per mile. That contract was afterwards extended to Suez at a much lower rate per mile, and certain alterations in our Mediterranean lines were afterwards effected which produced the existing fortnightly service with Bombay, and this, I maintain, costs only 2s. 7d. per mile; I know that if you separate Bombay from the rest of the service, the Calcutta and China portion will come out at somewhat more than 4s. 6d.

3024. That is a very simple arithmetical question; you perform a certain number of miles, for which you receive a certain sum of money?—Yes, the average that was given the other day by Mr. Chetwynd from the Post Office, and the questions put to him, left the matter very much where I have put it that what you take away from the Bombay service is to be put on to the other parts of the service; yet, as an actual fact, that service was undertaken and has been carried on for a large number of years at the average of 2s. 7d., and on taking the quarterly account furnished by the company to the Post Office, it proves that they pay us at the rate of 2s. 7d. a mile, as our account audited shows it to be so. The existence of the line between Bombay and Galle, which is now so much disparaged, was one reason why we were able to take the Bombay service at so low a rate, because an alternative means of bringing on and carrying to China the valuable cargo which we have upon that line was created. When we tendered for the contract in 1853, the line between Bombay and Galle was not included in the invitation for the tender. We tendered for the whole service, and we offered to do that branch for nothing, knowing that it would prove a valuable link in our great system; and it was by having it combined with the system that we were able to take up the Bombay service at the very low rate at which it has been carried on ever since. Our total subsidy was described by Mr. Knight to be 400,000 *l.*, the actual amount is 349,000 *l.* It was stated that a company subsidised at that rate could, of course, destroy all competition, but in other parts of the evidence of the same witness it was stated that many vessels unsupported by a contract were now running up and down the Red Sea. That is the case. With regard to those vessels carrying letters I do not know whether the Post Office avail themselves of their power to put them on

board as ship letters, but I imagine not. There is also a conflict of evidence upon the point whether we do or do not carry second-class passengers; the book which I have before me, and which the Committee will see, is not made up for the purpose of this inquiry, is a book which is put before the Board every Tuesday and Friday, noting the arrival and departure of the ships, and the number of passengers that are on board. I open this book at random, and I find that the "Nyanza" arrived at Southampton from Bombay on the 12th of December 1864, with 41 first-class passengers and 24 second-class passengers. The "Nyanza" again arrived in February 1865, with 14 first-class passengers and 24 second-class, and the outward vessel which left in the same month, took 19 first-class passengers and 21 second-class; and I could multiply those cases to any length, if it were thought necessary. It was stated also by Mr. Knight that the commencement of the operations of the Collins line produced a reduction of the Cunard fares from 50*l.* to the present rate of 25 guineas. I find that there never was such a rate as 50*l.* upon the Cunard line; the highest amount that they ever charged was 39 guineas, and that is 18 or 20 years ago. At that time, the Peninsular and Oriental Company charged 140 *l.* to Calcutta for a gentleman, and 150 *l.* for a lady, and rates generally have undergone a very great reduction since that time. I think I may state that the opening of the Collins line had no effect whatever upon the Cunard rates.

3025. I presume that a great many of those second-class passengers that you refer to are servants?—They are; but you will see that when the number of second-class passengers exceeds the number of first-class there must be a great many other than servants. I may mention that, about a fortnight ago, a gentleman came to our office, and the clerk was rather surprised at a person of his appearance wanting a second-class passage, particularly as he was taking his wife with him. I was called into the outer office to see him, and I found that he was a military man, and evidently a gentleman. I asked him whether he was well aware of what he was doing, especially as he was taking his wife with him, and whether he knew that he would have to sign this guarantee form which has been put before the Committee, and which I will explain presently. He said, "Yes; but the fact is I have overstayed my time in England, and I have spent my money. I know what your second-class is. I have travelled often by your vessels, and I am not afraid to encounter your treatment of second-class passengers, not only for myself, but my wife." I know that in the vessel which Colonel Strachey travelled by the other day, there were three officers who travelled as second-class passengers; in fact, there is no difficulty about it. The reason why we take this guarantee is simply this: some five or six years ago one of the railway companies came to us to carry out a number of their artisans; they were a difficult class of people to deal with, and the railway company had no control over them after they embarked on board the vessels. We are sometimes in some uncertainty as to which particular vessel may be arriving up at Suez in conjunction with the vessel on this side. We may have accommodation for 50 second-class passengers in the vessel on this side; but the vessel which comes up on the other side may perhaps only have

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have accommodation for half that number. This occurred on one occasion, two or three of the railway artisans, holding ordinary second-class tickets, took us into the court at Bombay and recovered damages, because they did not get a berth. Since that we require passengers to sign this guarantee form, and I can assure the Committee that there is not the slightest objection on the part of anybody to sign it; that is, any of those who know what it means. We receive constant application from the India Office to send out a number of people, and they say in ordering the passage, "Please send us guarantee forms." They ask for them as a matter of course, and since we have had those forms in use I have never seen or heard of a complaint from a second-class passenger.

3026. I suppose that you have no second-class accommodation for ladies?—No, we have not; and it is certainly not unreasonable. At many times of the year we can fill our ships, or nearly fill them with passengers, both perfectly willing and able to pay first-class fare, and it would scarcely be fair to our shareholders if we set aside a large portion of that vessel to be always available for second-class passengers; and then what we charge for second-class is not as is usual upon a railway, a small amount less than the first-class; it is only about one-half of it. When we reduced our fares generally to and from India, about two years ago, we did not reduce the second-class, so that the present second-class fare is somewhat in excess of one-half of the first-class fare.

3027. A second-class passage implies, does it not, the doing of that on the part of the passengers going second-class, which many of the first-class passengers do by choice, that is to say, sleeping on deck?—It is so to the extent that they may have to do it. The very gentleman to whom I have referred told me, "I have tried the second-class as well as the first, and the only difference is, that you do not give them wine," but we give them beer and spirits. It was stated by Mr. Knight, that the Peninsular and Oriental Company conduct its affairs with great waste and extravagance. I do not want to trouble the Committee with further extracts from this paper; but we there are accused of the cheese-paring system. There was a question put which is rather important, as to whether our coals were unprotected at Aden, and it may appear strange at first sight why the coals at Aden are unprotected; but at Aden there being no rain the coal does not suffer that amount of deterioration from exposure which occurs at those stations where we have both rain and heat. Where we have alternate rain and heat the coal undergoes what may be called a slacking process, like so much lime, and a large crust of coal becomes absolutely wasted and useless if unprotected. It was also stated that the system of supplying wines and spirits to passengers must lead to great waste and extravagance, and that it was the practice of some passengers to punish the company for what are called their extortionate fares by drinking as much as they could. It is hardly necessary, I presume, to notice, that if we take into consideration the immense number of passengers we carry this question of supplying wine and spirits dwindles into a mere nothing. I have no doubt that there is an impression that if we introduced the other system, of having a bar on board the vessels to

which the passenger who consumed could go and buy his wine, and the passenger who abstained could do the opposite, we could afford to make a very large reduction in the passage-money in favour of the non-consuming passengers. Since I was here last that matter has been most carefully gone into, and the amount per cent. is very much less than any one not knowing the facts would suppose. I will state at once, that all we could afford to do would be to reduce the passage money at the rate of five per cent.

3028. Admiral Seymour.] Have you ever heard that on the Collins line, when they issued wine and spirits, it was not an uncommon thing for young men to follow one another about with claret bottles, wasting the wine enormously?—I have never heard of that, but there would be one very great difficulty about it, because if we had a place on board where a passenger could go and buy his wine, he would claim a right to do it at all hours of the day, and he would buy a bottle of brandy, and carry it to his cabin. I may mention in further illustration of this point, that while the European and Australian Company were working the line between Sydney and this country, they introduced that bar system. They had one vessel of ours, the "Simla," under charter, and since I was here last I have spoken to the captain; he happens to be a senior captain in our service, Captain Cooper; and another captain in our service was the chief officer at the time. I have a letter here from each of them, and without reading them I may say that their verbal and written statement is to this effect, that they never saw so much which approached to intemperance on board any vessel; that it extended from the passengers to the crew, the officers having to interfere to prevent passengers taking liquors amongst the crew; and they both state as their positive opinion, and all our commanders would corroborate it, that the introduction of that system would be distasteful to a very large majority of the passengers on our line.

3029. Does the Messageries Imperiales adopt the bar system, or what you call the *ad libitum* system?—Their's is a mixed system, they supply wines of a certain quality. I think I am right in that, and I believe that if a passenger requires wine of a higher quality, he can have it by buying it. The system on board our vessels is assimilated as much as possible to what a private gentleman would adopt in his own house. We put good fare, and wine and spirits before the passengers at proper time, and they take what they please, and instances of intemperance are rare. I do not know whether it was understood that our coals are unprotected at other places than Aden. I was going to say that a gentleman who held the position of superintendent of the company at Aden for a great many years, was in the room the other day, and he told me he tried the experiment of covering some of the coals at Aden with mats, and as it is a constant practice there to test the temperature of the heaps of coals with the thermometer, to see that there is nothing like spontaneous combustion going on, or likely to take place, he found that the temperature of that part of the heap of coal which was covered was 10 degrees higher than that part of the heap which was uncovered; at other stations, at Point de Galle, Calcutta, &c., our coals are all under cover. With regard to the amount of imported specie to Bombay (and that is a matter which concerns us very closely), it was stated by

by Mr. Knight to be at the rate of 10,000,000*l.* per annum. I should be very glad, indeed, if it had been so, because we should have had the carriage of the greater amount of it. The actual amount of specie imported into Bombay for the last 10 years is at the rate of 6,367,000*l.* a year. It was stated that by reason of our going four days under our contract speed, which of course we do not admit, there was a loss of interest to the public of 30,000*l.* or 40,000*l.* per annum. The interest upon the real amount, presuming we were four days late, at 9 per cent., which is the interest of the port, would be 6,367*l.* a year.

3030. Mr. *Laird.*] That is, supposing the statement to be correct?—Yes, and taking the amount actually carried, and not the 10,000,000*l.*

3031. *Chairman.*] Have you anything further to state to the Committee?—If I may be permitted, there is one more statement to which I would wish to refer. It was insinuated that we went slowly in order to save our coals, and that it suited the company wilfully to go slowly, and to incur the penalty which was involved by a late arrival. An examination of the actual results proves this, that the economical voyage to us is the quick voyage. That may appear somewhat opposed to the theory which would be mentioned in professional evidence. But in a slow voyage, we are consuming a greater amount of coal than we are burning on a fast voyage, in order to overcome the weather to which we are subjected; and over and over again, for voyages both on the Calcutta and the Bombay lines, we consume, in practice, a larger amount of coal for a slow voyage than we do for a quick one.

3032. Mr. *Stansfeld.*] But under some conditions of weather you would not consume more coal by going at a slower speed?—Certainly not.

3033. The theory is, that by diminishing your speed, under similar circumstances, you save your coal; there can be no question as to the truth of the theory?—Each vessel that we employ has been tested to 12 knots an hour on the measured mile, when loaded to her deep load line. That has been for the attainment of 10 knots at sea. There would not be so much saving on diminishing the speed of such vessels as there would be on diminishing the speed of ships tested to 9 or 10 knots only.

3034. *Chairman.*] Did you hear the evidence which Mr. Samuda gave the Committee?—I did.

3035. Did you concur in the results which he communicated to the Committee?—I could hardly venture to follow him into particular, but generally I did. Mr. Samuda made certain statements with regard to existing vessels of the company which I cannot pretend to speak upon, but he knows our fleet, being the builder of some of our vessels, and he watches our proceedings, so that he is able to state that such-and-such things might be done with such-and-such vessels to produce certain results.

3036. Are you prepared to say anything upon the question of separating the Indian service from the China service altogether, and making a distinct line to Bombay wholly separate and independent of the China and Australian mails?—If a proposition of that kind came before the directors, they would give it full consideration looking at the circumstance which I have mentioned before, that anything that interferes with our means of carrying cargo upon the lines would have to be made up by subsidies. That very line between Bombay

and Point-de-Galle is an exemplification of the matter, although it is now considered of no value, either for local or Imperial interests, yet it is of great use to us, and the public have derived the advantage of it. It was stated that steamers other than ours are constantly running with opium between Bombay and China, but I do not think that that is going on now. Vessels have been running there, but the last I heard of them was that they were being sold. I think the house of Cama & Co. were taking them over, and I do not fancy that the parties who made that experiment have found it very well worth their while to continue it.

3037. Sir *Charles Bright.*] Were those vessels carrying passengers?—I do not think so; they run at irregular seasons when it suited them, just as we should run if we had not contracts.

3038. Were those vessels mainly employed in carrying opium?—Yes. I wish to mention that there seemed to be some difficulty the other day in accepting our statement that an addition of from 20 to 25 per cent. is necessary to the cost of the coal as delivered at a station in order to arrive at what its value is when put on board the vessel.

3039. *Chairman.*] I presume you have got a general coal account upon your books?—Yes, we have.

3040. And you credit that account, and debit the ships with the quantity of coal that they consume?—Yes.

3041. Is there any profit made upon the coal account?—Certainly not; the Government buy coals of us occasionally, and the French Company have bought coals of us, and we always make that charge of 20 per cent., but 20 per cent. does not cover it. I stated 25 per cent. the other day, and ventured to say that 20 per cent. was not enough. Since I was here that matter has been most carefully gone into, and it is found that it comes out exactly at 25 per cent., so that if anybody buys 200 or 300 tons of coal of us, and we only charge 20 per cent. in addition to the cost of laying down the coals at the port from which they take them; we are incurring some loss. We have at all times a sum of money locked up in coals of about 250,000*l.*, so that the interest upon that sum is a permanent charge, and forms one of the items which make up this 25 per cent., the cost of agencies, coal sheds, and all that sort of thing, fully makes up the rest.

3042. Mr. *Stansfeld.*] The addition of 25 per cent. makes your coal account balance?—It does upon the average of the year.

3043. *Chairman.*] All those are charges and contingencies which you think that any company must be prepared to meet, which proposes to undertake the service which you are engaged in?—It is only by making those charges that we have succeeded in maintaining ourselves in the position in which we are. The Committee are asked to believe that our position is something very different from what we make it in our accounts, but the directors have received a large sum of money in trust from the shareholders, and they feel bound to keep the whole concern in such a position as in case of having to stop, and having all the vessels sold, and those stocks of coal, &c., thrown upon their hands, they would be able to return them 20*s.* in the pound. We should think that we were in a very unsound condition if that were not so. Other companies who have been dazzled by large subsidies, for instance, the company that took up the contract with Australia six or seven

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years ago, in the course of about a year and a half paddled and screwed away into the ocean some 800,000 *l.* or 900,000 *l.*, and nobody was the better for it; and the Government, for a certain period, had to pay at the rate of 250,000 *l.* a year for the transport of mails between this country and Sydney, in order to provide against a gap in the service, they had to give a guarantee to the extent of 6,000 *l.* per voyage beyond the contract rate in order to induce the contracting company to go on with the work till other means for carrying it on could be found. A good deal has been said about our dividends not representing our profits. Our dividend is a modest one, and it has been on the average of the 25 years that we have been at work, exactly 8 per cent. We do not insure our vessels, but we keep a separate underwriting account, in which every individual shareholder in the company has an interest, and upon that account we have divided exactly one-half per cent.

3044. Mr. *Moffatt.*] Does not a considerable percentage arise from their becoming their own underwriters?—One and a half per cent. only has been divided upon the underwriting account. Some few years ago the same thing was said as is said now, as regards our profits, and we offered to open our books to the Government. They sent down auditors from the Transport Office, our books were laid before them, and they reported that we were only doing what was right in making the reserves we do for depreciation and other purposes, and that we were only paying a fair dividend upon our business.

3045. Mr. *Stansfeld.*] If I understand you rightly, your contract speed is 10 knots an hour?—Yes, the speed of the contract is 10 knots an hour.

3046. But you have an allowance during the period of the monsoon?—Yes, we have an allowance during the period of the monsoon, and we have what you may call a discount on the contract speed; the 10 knots is reduced to nine and a half knots in consideration of the circumstances that we rarely make a voyage as measured in a straight line from port to port, especially during the monsoon.

3047. On average measurement it is 10 knots?—Yes; we now work under what has been called the contract of February 1866, but this, in point of fact, is no contract, for it leaves our contracts of 1853 and 1854 as they stood, and the very last words specially providing that nothing in the agreement shall override any clauses of those contracts, except in the manner necessary to introduce the premium and penalty system upon the lines.

3048. What proportion of your voyages are unfavourably affected by the monsoon in the course of a year?—Perhaps 10 in a season. It was originally met in this way; during the monsoon months the date of the ship's departure from Bombay was put down, I think, four days earlier than the date at other seasons.

3049. They gave you an allowance of four days?—We started earlier, and arrived at Suez on the same day as usual.

3050. How many voyages are affected by the monsoon?—Ten voyages.

3051. Only the homeward voyage is unfavourably effected by the monsoon, I believe?—Precisely so.

3052. Have you no monsoon allowance upon the outward voyage?—Not on the Bombay service.

3053. Between Bombay and England you have a monsoon allowance upon five voyages home?—Yes, that is to say upon 10 voyages in five months; we come fortnightly, and the monsoon months are five.

3054. That is 10 voyages out of how many?—Ten out of 24.

3055. And the allowance is an allowance of four days, is it not?—Yes, of four days on those voyages; the usual course on leaving Bombay to make a track which would carry the vessel, I suppose, down to a latitude of 4° north, making a very roundabout course. In fact, a vessel goes over fully one-third, or perhaps one-half, a greater distance than she does during the other seasons.

3056. If you were to average that allowance over all the voyages in the year what would it give you?—It is averaged in that return which Mr. Hill has put in.

3057. It would add something like two days?—I suppose it would upon the whole; the result of the calculation is shown in the return of Mr. Hill's, which makes it so many days.

3058. That monsoon allowance would not increase your average length of voyage more than two days?—No, it will not, taking all the year round.

3059. How do you make out that you do the 10 knots an hour between England and Bombay?—I am not aware that we have stated that we have accomplished 10 knots an hour between England and Bombay, or between Suez and Bombay.

3060. What was your statement?—I do not think that I have put in any return upon that point; I know what we have done very nearly for the last year; and we are quite ready to admit that during the last year, or perhaps a year-and-a-half, we have not come up to our own expectations and wishes upon the Bombay line. Some vessels which were placed upon the line have not altogether fulfilled the expectations held out for them. We sought to produce a great improvement in the consumption of coal and also an increase of speed, but we have been to some extent disappointed in that; alterations in those vessels are however going on.

3061. I thought, I understood from you, that you have on the whole done better than your contract?—I base that statement upon Mr. Hill's report, and upon his average, in which he gives us credit for all the deductions as they are in the contracts, and it comes out that we have upon the average done our work for the years 1864 and 1865, two hours and seven minutes under the time allowed us.

3062. That is after making the monsoon allowance?—Yes, after making the monsoon allowance. We know quite well that when the papers are received home we shall incur some penalties in respect of late arrival on particular voyages.

3063. But if that be so, putting on one side the delays which you cannot avoid during the monsoon, you must be able to show a speed of 10 knots an hour upon the annual voyages?—Yes; in many we show higher speed; I could give you numberless voyages on which a much higher speed has been attained.

3064. In how many hours do you arrive at Marseilles?—In about 36 hours from London to Marseilles; the mails leave London Bridge at half-past eight o'clock on one evening and our vessel leaves Marseilles about half-past seven to
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eight o'clock on the morning of the succeeding day but one.

3065. This calculation which has been placed before me gives to Marseilles 30 hours; and sea distance from Marseilles to Bombay, 4,460 miles at 10 knots an hour, is 446 hours, making 475 hours, and the 15 hours' journey through Egypt, 491 hours; that would be 20 days and 11 hours. If you were to add the monsoon allowance which averages throughout the year two days it would be 22 days 11 hours; but if this statement before me is correct, your average of the voyage outward to Bombay in 1865 was $24\frac{1}{2}$ days, leaving, as you see, two days unaccounted for?—I should think that the transit through Egypt must be understated. I do not think we ever get away in 15 hours. No allowance appears to be made for stoppages in your paper.

3066. The question is whether 15 hours is a fair allowance?—Yes, but then you have the detention at Aden to calculate. We cannot get both the cargo and the passengers through Egypt in that time. It is a frequent source of small remonstrance between us and the Post Office; they get their mails through and on board the ship, and they want to hurry us away.

3067. *Chairman.*] If you had a weekly mail you would not have occasion to detain the mails for passengers or for cargoes; that is to say, the passengers would not mind, many of them, staying perhaps a week in Egypt?—I think the majority of the passengers would prefer to go through.

3068. *Mr. Stansfeld.*] Does the monsoon help you in the outward voyage?—Undoubtedly it assists us.

3069. With regard to coal, what kind of coal is imported into Bombay for the ordinary market?—I see the description of coal in the price-current which I hold in my hand is Welsh Hartley. I do not know what Welsh Hartley is, but Welsh Hartley alongside is quoted at 42 to 44 rupees a ton, and West Hartley the same price, 42 to 44 rupees—that is the last price-current.

3070. How much of the coal imported into Bombay is for steam purposes?—Nearly the whole of it. But the ships that load for Bombay in the ordinary way take coal where they can get it, and the owners do not take, perhaps, very much trouble to buy the best.

3071. But they would get their coal either in London or in Liverpool if they sailed from this country, would they not?—Yes.

3072. In any English port from which they would be likely to sail they would be sure to find either good north country steam coal or good Welsh steam coal?—I do not think I could admit that. In Liverpool the large steam companies have the control of all the best coal. We ourselves cannot get the best coal at Liverpool. Messrs. Cunard and the Pacific Company and others have got the command of all the best coal.

3073. Do you know the consumption of coal at Bombay?—No; it must be something very large now.

3074. Do you think it is 140,000 tons a year?—It is not so much.

3075. What is your consumption in round numbers?—I cannot state that; I suppose it would be 30,000 or 40,000 tons.

3076. What period of consumption does your stock represent; is it a year's consumption?—Not so much as a year's. We do not like to fall much below six months. At Bombay, knowing

that coals are always to be had, we are not so particular. We do now and then take advantage of the market. We give our agent authority to buy coals in the market if he can find them good.

3077. Your stock at Bombay is not so large proportionately as at other ports?—No; we do not require to keep so large a quantity there.

3078. If I were to ask you whether the average market price of steam coal at Bombay from 1861 to 1865 inclusive had been from 30s. to 37s. according to quality, would you be disposed to think that a correct statement?—I have it here exactly. In consequence of the evidence which I heard, and in order to check the cost at which we lay down coals I have obtained from a reliable price-current the cost of coals for the last four years.

3079. What price-current do you take that from?—That was one, I think, kept in Messrs. Smith and Fleming's office. The average price of coal in the Bombay market at per price-current quotations from January 1862 to March 1866, comprising four years and three months, taken from alongside, is slightly in excess of 21 rupees, that is 42s. per ton alongside the ship. I think in my evidence the other day I stated that the Company had supplied themselves on a five years' average at 35 s.

3080. I suppose 1866 has been rather a dear year?—1866 is a very dear year.

3081. The average I have is from 30 s. to 37 s., but that only includes 1865, I presume?—Precisely.

3082. You make your average 35 s. 6 d.?—35 s. or 35s. 6 d., I hardly know which without looking at my figures.

3083. To that 35 s. 6 d. you ought to add, ought you not, 25 per cent.?—I did so; I think if you refer to my first day's evidence, you will find that it is so. In this matter I am dealing with evidence which I thought came into conflict with the fact. I therefore take coals alongside in one case, and I take coals alongside in the other case.

3084. But now you credit your coal account, and you debit the voyage with coals at 35 s. 6 d., plus 25 per cent.; that would be 44 s. 6 d.?—Yes, but we do not do it exactly in that way on our books. We average it to some extent; one port does not require quite so much, and another will require more.

3085. But more or less you add that kind of percentage to the figures which you have already given us?—We do.

3086. For the purpose of comparing what you call the cost price of your coal with the selling price at Bombay, that 25 per cent., or some percentage of that kind, ought to be taken into account?—Decidedly.

3087. You do not make a profit upon the coal account?—No.

3088. Therefore, according to your calculations, if they are correct, you charge coal simply at cost price to the vessel?—Yes.

3089. But the coal in the Bombay market must be sold at cost price, plus the profit?—I think as a rule, they take coal as ballast. I do not think that coal is often taken out as an article to make a profit upon; coal is a convenient article to have on board in the hold; the amount of it depends very much upon the general character of the cargo of the vessel.

3090. It must depend upon the supply and demand,

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C. W. demand, and they make a profit if they can?—
Howell, Esq. They doubtless make a profit if they can.
 18 May 3091. They must make a profit when they
 1866. can, and your rule is not to make a profit on that
 account?—That is so.

3092. When you gave the price of 35 s. 6 d., for what year was that?—35 s. 6 d. was the average of the last five years, I think, including the whole of the year 1865. I gave a much higher figure as the price of the last operation.

3093. One thousand eight hundred and sixty-six we are agreed is a dear year; but taking the average cost or price of coal from 1861 to 1865, you made yours 35 s. 6 d., plus, I will call it, 25 per cent (it may be 20 per cent.), making your charge against the voyage, say 44 s. per ton?—Yes, certainly.

3094. The maximum average price for delivery in Bombay in the open market was 37 s.?—The price current I read made it 42 s.

3095. Your return includes the exceptional year, 1866. I am taking up to the end of 1865, which is the period for which you calculate that the cost of coal is 35 s. 6 d.?—Yes.

3096. Can you elucidate in any manner that apparent considerable difference. What strikes me is that during that period of five years the average selling price at Bombay of steam coal, of the best quality to be had there, was 37 s.; and the price which you charge on the voyage is 44 s.?—There is the addition of the 20 or 25 per cent. to account for the difference. I am afraid that I am hardly gathering what the Honourable Member desires to elucidate; I wish thoroughly to understand the question.

3097. Let us put it in a different way. The price at which you charge coal in your account of the voyages ought not to be more than the average price of the best coal in the open market at Bombay; and assuming that to be so, I find that the average price of the best steam coal in Bombay, in the open market, from 1862 to 1865, was 37 s. a ton, and that your charge is 44 s. a ton?—We laid in our coals at somewhat less than the average, which you give of 37 s.; we laid them in at 35 s. 6 d. and adding to that the per-centage of 25 per cent., it comes out at about 44 s.

3098. Then the question arises, whether that per centage is not too large a per centage; that results in your crediting the coal account to 44 s. per ton, whereas in the open market, you can buy it at 37 s.?—Yes, but then you buy coal alongside a ship in the open market; we cannot send our steamer alongside a ship which has coal to sell. The price which I have given here, as the average of the years from 1862 to 1866, is coal alongside; if we buy such we have to land and to store them. At Galle, when we are going on the Australian voyage, we know that fresh coal is essential to us, and we endeavour, if we can, to arrange to send our steamer alongside the coal vessels if the weather permits, to take coals from one to the other, and then we escape some of those charges that we have been speaking about; but taking the general average of our business, we do not escape them to any extent; anybody requiring to fill a steam vessel with coals, or those who made it their business to buy and store coals at Bombay, would incur all the expenses which we incur, and the coal merchant would sell those coals to the consumer at the enhanced rate at which we charge them to our vessels. It would be a most exceptional condition of things if you were able to send a

steamer alongside a vessel which had 300 or 400 tons of coals on board for sale, and take them and burn them in that way.

3099. Mr. *Moffatt*.] Is it not the fact, that with your judgment and experience in these matters, you find it necessary to keep as much coal at your various stations as comprises a capital of 250,000 l.—That is so; that is the actual average of the year.

3100. In point of fact, you cannot afford, can you, to run the risk of the chance of the arrival of coals at Bombay, or any other port, to coal a steamer when she comes in?—Certainly not.

3101. The consequence of that is, that the difference of 7 s. per ton goes to make up the interest on the 250,000 l. at 9 per cent.?—Yes; interest is one element of that charge, of 20 or 25 per cent., but we should not put it so high as 9 per cent.

3102. What is the total quantity of coal that you consume on the Indian stations?—I am afraid that I can hardly venture to give that without data; we have spent as much as 750,000 l. in one year alone upon coals.

3103. *Chairman*.] Have you any further document which you would wish to lay before the Committee?—Yes; I have here a paper with reference to dispatching the Indian mails upon a fixed day in the week, making the Australian mails start once a lunar month, instead of once a calendar month, as at present; and this paper is important, inasmuch as it shows that the plan would interfere most materially with the Australian line, so much so, in fact, that it cannot be worked at all; it brings about a constant alteration of the day of the month for the dispatch of the Australian mail from England, and a constant alteration of the date of the dispatch from Sydney; it also increases the course of post very much, and there is a constantly varying time for the detention of the steamers and of the interval between the arrival and dispatch of the mail in Sydney.

3104. But there would be no difficulty, would there, in the event of their having 13 mails a year to Australia?—The difficulty is that which arises from having 13 mails in the year to and from Australia, as compared with the present system of 12. This table illustrates the result of having 13 mails in the year instead of 12. I assume in the table that the system came under operation on the first Friday in January last, and the table works the system out through the present year (*delivering in the same*).

3105. Do you mean to say, then, that a service of 13 voyages in the year would be more inconvenient to the people in Australia than one of 12 voyages?—It would require four ships to do the work instead of three, as at present. The community in this country would have to look to see on what Friday of the month they would have to write the Australian letters, and the community in Australia the same.

3106. Mr. *Marsh*.] With the present speed, they would not be able to get an answer by the return post, if there were 13 voyages in a year?—On one occasion the interval between the arrival and dispatch of the steamer at Sydney is brought down to one day, so that that would not do for the country. I may mention that the Company have been very recently in correspondence with the Post Office with reference to an improved service on the Australian line, and we gave them to understand that if they would give us a contract for a sufficient number of years, we would

would build a set of ships specially suitable for the requirements of the line. In reply, they have stated that they are not able to entertain the proposition at the present time.

3107. *Chairman.*] Have you anything further to state to the Committee upon your communication with the Treasury, with regard to the service with Japan?—No; that matter at present stands in this way: we have been carrying on that service for two years, and have received nothing for it. The Government asked us for what amount we would undertake to continue it and we offered to do

it for the very low sum of 5,000*l.* a year. They have since asked us, but not officially, if we would do it once a month for less, leaving half the service to the French; and we have told them also, not officially, that we cannot make any abatement in the 5,000*l.* a year, whether this service be monthly or fortnightly.

3108-10. The Committee understand from you also, that your service with Mauritius is on the point of being brought to a close, upon the notice given by your company to the Government?—It is so; the last mail leaves on the 20th instant.

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HUBERT IZAAK WALTON, Esq., Examined.

3111. *Chairman.*] You have been employed, have you not, in connection with the Persian Gulf Telegraph Line at Kurrachee?—I have.

3112. In what capacity?—As director of the line from Kurrachee to Fao.

3113. When did you arrive in London?—On Friday last.

3114. When did you leave Kurrachee?—I left Kurrachee on the 11th of April.

3115. In what condition did you leave the line?—I left it in an excellent condition.

3116. In what time were the messages, as a general rule, conveyed between Fao and Kurrachee either way?—Between Fao and Kurrachee the average has all along been under two hours.

3117. In fact, there has been no interruption to the regularity of the service, has there?—There has been no interruption to the regularity of the service, except for a very short time, when the cable broke soon after it was laid.

3118. As long as the cable was in good condition you were able to send your messages from Fao, and receive your messages at Kurrachee from Fao, in something like two hours?—Yes, on the average.

3119. Is it your name that we have seen appended to some representations addressed last year to Mr. Mansfield, the Commissioner in Scinde?—Yes.

3120. At that time the service from Kurrachee into the interior of India was very defective, was it not?—It was very defective indeed.

3121. Is it at all better now?—When I left Kurrachee it had improved considerably. Since December last I think it had improved very much.

3122. What is the improvement the consequence of?—I do not think that the improvement is permanent yet, although it will be within the next three or four months, when the contemplated alterations have taken place in laying down a double line, and putting a new line through the Runn of Cutch. I think the route adopted, perhaps, might be changed.

3123. Will that line be a complete line, so far as insulation is concerned?—I do not know what insulators they are using. I have nothing to do with the Indian telegraph department just now.

3124. Have you anything to do with what you call the Indian service, as distinct from the Persian Gulf line service at Kurrachee?—No, from 1857 to 1860 I was in the Indian telegraph department, but since then I have been on special duty.

3125. You at Kurrachee were the director of the Persian Gulf line?—Yes.

3126. And you had nothing to do with the working of the Indian lines from Kurrachee?—

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I had nothing whatever to do with the Indian lines.

3127. You made certain representations to the Commissioner in Scinde; those communications had reference, had they not, to the accumulation of messages in the office at Kurrachee, which were not sent forward with the rapidity with which they ought to have been sent forward?—As far as I can remember, my communication was with regard to the general mismanagement, and, on this particular occasion, the delay of a great number of messages.

3128. Owing to what circumstance was that delay?—Owing to the defective state of the line between Kurrachee and Deesa.

3129. Did that state of the line prevent messages from being sent on after they were received in the Indian office at Kurrachee?—Yes, it caused a delay in some instances of two or three days in Kurrachee itself.

3130. In what condition were the messages from England received at your office at Kurrachee, generally speaking?—At first they were rather indifferent, but latterly they have been wonderfully correct considering the number of different States that the messages passed through, and that they are handled by men who speak different languages to that in which the messages are conveyed.

3131. Great complaints have been made before this Committee of the defective condition in which the messages have been received in India and in London; from your experience do you consider that those defects were due to the mismanagement in the Turkish system, or in the Indian system?—In the case of messages from England, the defective state of the messages must be due to the mismanagement between London and Fao.

3132. Were the messages for England received at Kurrachee from Bombay and Calcutta generally received in good condition?—I think there were equally as many, if not more, errors in the messages on their arrival at Kurrachee from India, as on their arrival from England at Kurrachee.

3133. You found, did you not, that before you left Kurrachee an improvement was taking place in both particulars?—Yes, on both sides a great improvement was taking place.

3134. There is a line, is there not, from Kurrachee to Gwadar, by land?—Yes.

3135. Do you use that line at all?—We use it in case of the cable breaking, and for all local purposes and messages on the telegraph service, or from the town of Gwadar itself to Kurrachee, and the charge is much less on that line than by the cable.

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3136. Would

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H. I. Walton, Esq. 3136. Would there be any difficulty in extending that land line along the Persian Gulf?—Not the slightest difficulty all the way to Bunder Abbas, immediately to the north of Mussendom.

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3137. And so along the shore of the Persian Gulf to Bushire?—I do not know anything about the country beyond Bunder Abbas, but as far as Bunder Abbas there would be no difficulty whatever, either from the nature of the country, or from the habits of the people.

3138. You have had no difficulty in dealing with the people on the Mekran Coast, between Kurrachee and Gwador, have you?—Since the line was constructed they have never attempted any injury to it, on a single occasion.

3139. *Mr. Marsh.*] Are the people Beloochees?—Yes, they are Beloochees; they call them the Mekranees; they are a different caste of men altogether from the Hill Beloochees; they are very good people indeed if they are treated properly.

3140. *Chairman.*] Looking at the risks to which all submarine lines must be to a certain extent subject, would it not be a very great safeguard as respects the interest of the people using the telegraph, to have an alternative line as far as is practicable on land?—Most decidedly so.

3141. Would it not also very much facilitate the forwarding of messages to and fro?—Very much so indeed.

3142. What would be the expense, stating it very roughly, of continuing the line from Gwador to Bunder Abbas?—I should imagine it would be about from 80*l.* to 85*l.* a mile; that is to have a good permanent double line.

3143. Do you think that the line as at present existing, a single line, down the Persian Gulf to Kurrachee will be sufficient, as the business increases, to carry the whole of the messages passing to and from India?—No, it is just sufficient for the present work; but there must be another line made very soon, I think.

3144. And in that case would not the extension of the land line to Bunder Abbas be an advantage?—A great advantage.

3145. And still more so if you could connect Bunder Abbas with Bushire, and so bring it into communication with the Persian line?—Yes, and so we would have an alternative line the whole way to England.

3146. A proposition has been made to this Committee for the making of a line through Egypt to Aden, and along the southern coast of Arabia by way of Muscat, to Mussendom; if that line were to be made, would it be possible, do you think, to convey all the traffic upon the single line at present existing, or even upon the double line which you have been suggesting?—If that alternative line were made there would be an immense local traffic between Bunder Abbas, and those places in Persia through which the line would pass to Kurrachee and Bombay, and other parts of India.

3147. Do you think that there is a sufficient foundation of commerce between Persia and India to supply a large amount of local traffic?—Yes, there is.

3148. I presume all your messages are sent in English?—Yes, all our messages are sent in English.

3149. And of course a native, whether he understands English or not, is obliged to have his message translated for him into the English lan-

guage before you can send it?—Yes; in every station there are moonshees who put their messages into English for a very trifling sum.

3150. Looking at the probable extension of the telegraphic system eastward from India to China or Australia, do you think it possible that with such an additional service to perform the Persian Gulf line could carry on its work without some addition to its present means of forwarding messages?—I think that if the alternative line were made it would be quite capable of doing the whole of the work.

3151. Do you think that two wires would be sufficient?—Yes; we can form a very good idea of the amount of telegraph traffic with our Eastern Colonies from what we do at present, and I find that of all the messages received at Kurrachee, Singapore, China, Japan, and Batavia, one-tenth are for Australia. If the telegraphic communication were extended, I believe that there would be an equal amount of traffic with those places as there is at present with India.

3152. Have you brought any statistical information with you as to the working of your line?—No, I have only come home on leave of one month in England. I have nothing at all of that sort with me. I send in a monthly statement to the Bombay Government of the traffic receipts and the length of time occupied in the transmission of messages.

3153. As director of that line are you in charge of the accounts of the line as well as the practical administration of it?—Yes, I am in general charge of the administration of the line.

3154. Do you receive all the cash which is paid in and make all the disbursements?—Yes.

3155. And you render an account to the Bombay Government?—Yes, I do that through the Accountant General at Bombay.

3156. *Sir Charles Bright.*] What is the expense of working the line?—Including the steamer "Amber Witch," and all the expenses incurred in India, I think that the expense is about 26,000 rupees a month at the outside.

3157. That is how much in English money per annum?—£. 31,200.

3158. What were the last month's receipts of the line before you left India?—I cannot remember exactly; but it was about 85,000 rupees per month, or at the rate of 102,000 *l.* a year. The revenue would be very much larger if the service were properly conducted on either side of my section.

3159. At present it appears that you are earning a profit of about 70,000 *l.* a year?—No, there is the value of the English stores to be deducted, and the wear and tear of the cable.

3160. But your own expenditure and receipts show a balance of about 70,000 *l.* a year at present?—I think that I reported to the Government that we might anticipate a profit of 60,000 *l.* a year. That is on the safe side, I know.

3161. You have a regular day and night service, have you not?—Yes; we have a continuous service.

3162. And you select the signallers from Europe?—Yes; they are first-class signallers.

3163. Is there not some proposal to alter the course of that line to Angaam at the other side?—Yes; owing to the unhealthiness of Mussendom, and the almost impossibility of keeping Europeans at such a place, the advisability of altering the course of the line is now before the Government.

3164. Have

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3164. Have you had any trouble at all with the Arabs at Mussendom?—None whatever.

3165. The Arabs in the Gulf are in a state of revolt now, are they not?—If we let the Arabs alone, they will never interfere with us; and I take very good care that none of my people interfere with them, so that we have had no trouble with them whatever.

3166. We have had it stated in evidence that in the month of March last, between Kurrachee and Bombay, messages were still being very slowly and inefficiently carried, to what do you attribute that?—The line to the eastward of Kurrachee goes through a very bad country indeed; and at the suggestion of Sir Bartle Frere, I have drawn up a scheme for a different line of cable from Kurrachee to Dwarka, and thence a land line through the rich cotton district to Baroda or Ahmedabad, and thence alongside the railway to Bombay.

3167. You spoke of the local traffic; what is the proportion of local traffic that you have now on the Persian Gulf line?—I cannot tell exactly now, but I think I should be safe in saying that it is worth 750 rupees a month.

3168. What was about the average time occupied by a message from the head of the Gulf to England, or from England to the head of the Gulf, at the time that you left Kurrachee?—I think it was two days and five hours; I cannot speak quite positively upon that point.

3169. Can you state the average on the other side, between Kurrachee and Calcutta?—Matters had improved very much when I came away; I think the average must have been from 15 to 20 hours.

3170. Then how do you account for the fact that we do not get any news as a rule from India now under five or six days?—I do not know at all what has happened since I left Kurrachee. I have heard nothing at all about it; the reports which I sent in every month to the Government will show exactly how the line works.

3171. You referred to the risks attending a submarine line, but it seems to be the fact that the submarine portion of the Indo-European Telegraph, namely, that portion from Fao to Kurrachee, is the only part of it which works satisfactorily?—The submarine line from Fao to Gwador is as good now as when it was laid, and it works excellently.

3172. I say it is the only part which works satisfactorily; all the land lines appear to give dissatisfaction, and the submarine cable is the only one which works well?—Yes, from Fao to Gwador it works very well, but from Gwador to Kurrachee it is parallel with the coast; and every monsoon it breaks and is likely to do so.

3173. Does the "Amber Witch" go up the Gulf frequently?—She goes up about three times a year on the average.

3174. What is her cost, including staff and coals?—Including coal and her commander's pay as engineer, her cost is about 3,400 rupees a month.

3175. Does she give satisfaction in her work?—As a cable vessel she gives every satisfaction, except that her horse-power is too small, and it cannot be increased without lessening her capability for carrying cable.

3176. You state, do you not, that the working in India has been improved?—The weather has improved and the working has improved; but whether the improvement of the working is to be

accounted for only by the change of the weather or whether it is owing to the better administration, I cannot say.

3177. Are the Turkish lines improving at all?—They improve sometimes, and then they fall back again; we cannot depend upon them.

3178. If the Turkish lines were in good order, and messages were carried from the head of the Gulf to England, say in half-a-day, what additional amount of traffic do you calculate from your observation of the traffic would be brought upon the line?—I do not think that there is more delay in Turkey than there is in Europe generally. I do not think that all the blame lies with Turkey.

3179. Our experience is, that the service through Austria is very well performed, and therefore we lay the blame upon Turkey, seeing that the cable has worked well?—In the middle of last winter, which was a very severe winter indeed, the Turkish telegraph worked as well as it could be wished, and at another time in the middle of the summer, when there is no reason for it, it breaks down; why it is I cannot say. But that it can work well, and that there is every probability of its working well, I think that there is not the slightest doubt.

3180. But if you could get a message from the head of the Gulf to England in half-a-day, the traffic, you think, would be very much increased?—The traffic would be doubled, no doubt.

3181. Therefore the Indian Government, through the bad working of these continental lines, are losing 60,000*l.* a year?—Yes, I think so.

3182. Mr. *Moffatt*.] What are the two termini of the Persian Gulf Telegraph Line to which your evidence has reference?—Kurrachee and Fao; Fao is almost the same as Busrah; it is a little lower down, just at the mouth of the river; and Busrah is 60 miles up the river.

3183. That telegraph is termed the Persian Gulf line?—Yes.

3184. Under whose responsibility is it carried on, that of the Indian Government, or of a private company?—Under the Government of Bombay.

3185. Can you state to the Committee any reason why messages should occupy 15 hours coming from Calcutta to Kurrachee?—No; I am not in the Indian Telegraph department.

3186. Have you been along that line?—I have been along nearly all of it many years ago.

3187. If properly administered, what, in your opinion, should be the time occupied in a message being conveyed from Calcutta to Kurrachee?—If there is a special line on purpose for certain messages, of course a message ought to be transmitted in 20 minutes.

3188. But as an ordinary telegraph line, what is the time that might fairly be occupied in the transmission of a message from Calcutta to Kurrachee?—I should say under two hours.

3189. And you state that upon the average it is about 15 hours?—Yes.

3190. So far as the Persian Gulf branch of the Indian telegraph system extends, there is a very large profit to the Government in its working?—I am not able to state that there is any profit, because I do not know the expenses of the stores from England, and what is allowed for the wear and tear of the cable and the interest on the capital.

3191. You

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3191. You were understood to say that on the Persian Gulf line there was a profit of 60,000 *l.* a year?—Yes; that was the profit in India.

3192. That statement of profit did not include the cost of maintenance possibly or incidental expenses?—Yes, it includes all the expenses of working, and all the expenses of which I am cognisant as director.

3193. But in your account that line is charged, is it not, with all the expenses which are necessary for its maintenance?—I do not know what the charges are in the Accountant General's Office for English stores and other expenses; they do not go through my office.

3194. They do not come under your supervision as superintendent of that branch?—No; I have nothing to do with the expenditure in England on account of the telegraph.

3195. You have stated to the Committee, as I understand, that at Kurrachee, which is your main station, delays frequently occur of two or three days in the transmission of messages?—That was only on one particular occasion, when I complained to the Commissioner in Scinde.

3196. What were those delays caused by?—I can only speak from hearsay, as I have nothing to do with the Indian Telegraph Department; but I believe they were caused partly by floods and partly by the offices not being properly manned.

3197. You are chief of the department at Kurrachee, are you not, as regards messages passing down the Persian Gulf line?—As regards all messages passing between Fao and Kurrachee.

3198. You are understood to say that delays have occurred there for two or three days before the transmission of messages?—Yes, on one particular occasion that was so.

3199. You are not prepared to state what the cause of those delays were?—Yes; it was partly owing to the floods and partly to mismanagement.

3200. Is the probability of the occurrence of those causes now removed?—Yes.

3201. Is the line now made secure against floods in the first instance?—No, I do not think it is; but I believe that the Director General of telegraphs in India is adopting means to prevent all probability of flooding by doubling the line, and putting it up properly.

3202. Has any marked improvement been made with regard to the administration of the telegraph, with respect to the manipulators of the messages at Kurrachee?—I cannot say, because I have nothing to do with the Indian Telegraph Department.

3203. What is the average time of messages in the present year from England to Kurrachee?—I have not the papers with me, and I cannot speak positively, but the average from January to April I think must have been about four and a half days.

3204. And with efficient administration, what time, in your opinion, should be occupied in the transmission of a message from London to Kurrachee?—We have had messages in two and a half hours. During February, I think the average was two and a half days for all messages for the month.

3205. And since February, has the delay increased in the transmission of messages?—Up to the time I left, the average was steady at about three days; every minute and every hour makes a difference in telegraphing.

3206. To what cause do you attribute this great difference between two and a half hours and three days in the transmission of messages by the Persian Gulf line?—The messages are delayed either in Europe or in Turkey, and they do not reach our terminus earlier.

3207. You have no practical knowledge of where the delay takes place?—No; I have nothing to do with the messages till they reach Fao.

3208. Mr. Marsh.] You stated that it would facilitate things very much if another wire were put up on the same posts by the existing route; what would be the expense of putting up that additional wire?—I think it would be a waste of money to put it up by the existing route, because that route is most objectionable.

3209. But for that distance, what would be the expense of an additional wire which would facilitate messages very much; how much per mile?—To carry another wire through the Runn of Kutch, I do not know what the expense would be; I cannot form an estimate of how much, because it is through the Desert, and it is a matter to which I have not given any attention at all; it is out of my sphere.

3210. What is the difference in original expense between a land line and a sea line?—That depends very much upon how the land line is made; if it runs along the sea coast or along a river where you can put stores at each place where you require them, the expense is very different to what it would be if it went through a barren country inland.

3211. I mean the expense of putting it up originally?—The difference of cost of a land cable is very great, according to the circumstances which I have indicated. In the one case you can put up one for perhaps 10 *l.* a mile, or 12 *l.* a mile, whereas in the other you could not put it up for less than 100 *l.* a mile.

3212. Do you know what the sea cable cost?—Yes; I should think that you could not get a good cable laid down in the Persian Gulf under from 350 *l.* to 400 *l.* a mile.

3213. A land line is preferable, is it not, in many respects, because it is more easily repaired when it gets out of order?—Yes, as an alternative line, I think it is most desirable to have a land line.

3214. Mr. Stansfeld.] Did I rightly understand you to say that the average time of messages between Calcutta and Kurrachee now was 18 hours?—I think it is from 15 to 18 hours.

3215. Are you prepared to state that as the average?—I am not prepared to state that it is an accurate average on any particular month, because I have not the statistics with me. Colonel Robinson well knows what it is, and I would rather leave the matter entirely to him.

3216. Did you hear the evidence of Colonel Robinson upon this matter the other day?—No, I have just glanced over it since I have been here. He is able to give an exact answer to that question, but I am not in a position to do so.

3217. Question 2932, addressed by Sir Charles Bright to Colonel Robinson is this: "What do you consider a fair time for a message from Kurrachee to Calcutta now?" The answer is: "Four or five hours; and it would be less if there were no local messages cutting in." Do you agree with that answer?—Yes, I quite agree with it.

3218. The

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3218. The next question addressed to him is, "In other words, you have not wires sufficient for your through traffic and your local traffic?" (A.) No, not yet; but they are being put in." Is that also within your knowledge?—I do not know what they are doing.

3219. But that answer of his you accept?—Yes.

3220. Then he is asked, "When this second wire is through from Kurrachee to Calcutta, I suppose from half-an-hour to 46 minutes would be enough?—(A.) Yes; we sometimes send direct to Kurrachee instantaneously;" do you endorse that statement?—I cannot speak from my own knowledge of what they do in India.

3221. Then the evidence of Colonel Robinson upon the question of telegraph communication between Calcutta, Kurrachee, and Bombay, you would consider conclusive?—I should think so.

3222. *Chairman.*] Who is your immediate superior in the department?—I report to the Secretary of the Government in the Public Works Department in Bombay.

3223. Are you in no degree subordinate to Colonel Robinson?—I am immediately subordinate to Colonel Goldsmid; but when Colonel Goldsmid is not in the country I report to the Government of Bombay direct; I am not in any way subordinate to Colonel Robinson.

Friday, 25th May 1866.

MEMBERS PRESENT:

Mr. Baillie.
Mr. Brooks.
Mr. Childers.
Mr. Marsh.

Mr. Moffatt.
Admiral Seymour.
Mr. Stansfeld.

GEORGE MOFFATT, Esq., IN THE CHAIR.

CHARLES STRONGE, Esq., further Examined.

*C. Stronge,
Esq.*

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3224. *Chairman.*] HAVE you a paper which you wish to present to the Committee?—Yes; it is a memorial which has been sent to the Treasury by the Colonial Office, which I was informed the chairman wished to have furnished to the Committee; it is from certain gentlemen and firms connected with the Mauritius, praying that Her Majesty's Government would contribute towards the expense of the postal packet service between Suez and the Mauritius.

[*The Witness delivered in the same, which is as follows:*]

“The Right Honourable *Edward Cardwell*, M.P.,
Her Majesty's Colonial Secretary.

“Sir, “London, 31 January 1866.

“WE, the undersigned, being interested in the trade between Europe and Mauritius, learn, with much regret and anxiety, that the direct postal service between Suez and that island is to be discontinued, and that tenders are invited for carrying the mails *viâ* Ceylon to Mauritius, a route which would require 42 days for the delivery of our mails, instead of 30 days, as at present, besides which, in order to meet the Peninsular and Oriental steamers at Point de Galle, the mail from Mauritius for England would have to leave Port Louis about four days before the arrival of the mail from England, which would be most inconvenient for the mercantile community.

“The following figures will show the importance of the trade of Mauritius:

	Tons.
Shipping entered inwards in 1863	- 312,802
	£.
Value of imports - - -	- 2,438,411
Value of exports - - -	- 2,517,280
Annual expenditure of the island -	600,000

“It need hardly be observed that a large proportion of the imports consists of manufactures and machinery sent from Great Britain, and that the greater portion of the sugar crop comes to this country, thus contributing largely to our national trade.

“The island of Mauritius is a most important Colony, having always been self-supporting, but is now undergoing a heavy outlay in railroads, and in consequence cannot afford for the present to pay more for the postal service than it does, viz., 36,000*l.* a year, which the Peninsular and

Oriental Company find is not sufficient to pay the expenses of the service.

“We are aware that there is a French line between Marseilles and Mauritius, but we respectfully submit that the postal service between this country and Mauritius is far too important to be left in the hands of a foreign company, which at any moment may cease, finding, as the Peninsular and Oriental Company have done, that the line does not pay without a large subsidy.

“The Colonial Government is, it is understood, still willing to pay the sum of 36,000*l.* for the postal service, and we earnestly request that, until the Colony can afford to pay more, Her Majesty's Government will make up the difference required by the Peninsular and Oriental Company to continue the present postal service between Suez and Mauritius.

“We have, &c.

(signed) “*Arbuthnot, Latham, & Co.*
“*Chalmers, Guthrie, & Co.*
“Oriental Bank Corporation,
 Charles J. F. Stuart,
 Chief Manager.

“*Samuel Baker & Co.*
“Ceylon Company, Limited,
 C. J. Browne, Manager.

“Mauritius Land Credit and
Agency Company, Limited.
 General Manager.

“*Leishman Brothers & Co.*
“*John Lidgett & Sons.*
“*Robert Glen & Sons.*
“*C. & C. J. Coles.*
“*Henckell, Du Buisson, & Co.*
“*Wilson, Swall, & Co.*
“*F. Green & Co.*
“*James Baines & Co.*
“*F. M. Mackay & Co.*
“*John Allan & Sons.*

“The Credit Foncier of Mauritius,
Limited.

Secretary.

“The Merchant Shipping Company,
Limited.

Geo. Hay Donaldson,
Chairman.”

Sir CHARLES NICHOLSON, Bart., called in; and Examined.

Sir C.
Nicholson,
Bart.

25 May
1866.

3225. Mr. *Marsh.*] You were Speaker of the Legislative Council in Sydney, for some time, were you not?—Yes, I was.

3226. And also in Queensland?—Yes.

3227. From your correspondence, do you know whether the mails go regularly to Sydney or not?—There are great complaints as to the delivery of the mails, owing to their being over time.

3228. They come back in good time, do they not?—Yes.

3229. From Sydney to England they are very seldom far behind their time, I believe?—Very seldom.

3230. Have you ever been the passage?—I have, two or three times.

3231. You know, therefore, what the course of it is; is it the strength of the south-east trade wind that delays the return passage down to Sydney?—I rather think it is.

3232. With regard to the telegraph, you are aware, are you not, that there are telegraph lines all over New South Wales and Victoria?—There are.

3233. As far as Adelaide, Victoria, and New South Wales lines are concerned, do they pay?—I believe that they have had very good success indeed, and they are very remunerative to the Government.

3234. Are they well managed?—I apprehend that they are as well managed as they can be in a new country.

3235. You never heard that they were badly managed?—I think not.

3236. How far north have they got them in Queensland?—To Rockhampton, which is in latitude $23\frac{1}{2}^{\circ}$.

3237. How far is it from there to the Gulf of Carpentaria?—To the head of the Gulf of Carpentaria would be, I should think, about 700 or 800 miles.

3238. From thence, of course, the cable could be carried on through Java, and up to Singapore?—I assume that such could be done.

3239. That would be a very great convenience, would it not, to you, and to everybody possessing property in Australia?—I should be very glad to see it from various public reasons, as well as, perhaps, some private ones. I may state that it has been a subject of great anxiety with all the Colonial Legislatures to establish this internal telegraphic communication, and there have been various reports by committees of the different Legislatures, and resolutions, and Acts, I believe, have been passed, offering to guarantee a very liberal dividend to the undertakers of any telegraphic communication that might be established between Australia and the British possessions in the east.

3240. *Chairman.*] To what extent have the various Colonial Governments been prepared to guarantee?—I think, if I may speak without absolute certainty, but to the best of my impression, a proposition was made to guarantee a sum equal to 35,000*l.* a year, in order to secure a dividend, upon any enterprise that might be established with the view of effecting a telegraphic communication.

3241. Are the whole of the Australian Colonies unanimous in that desire?—I think, substantially, it was the result of a negotiation which was carried on, that the Colonies were willing to

pledge themselves to an annual subsidy, or to a guarantee, but that it was only to arise in the event of the profits not realising that amount.

3242. What was the per-centage of dividend?—It was to be 5 per cent., if I mistake not.

3243. But the subsidy was to go no further than the guarantee?—No further than that; and, if there was a profit realised, the guarantee of the Government would not be made available.

3244. Were any statements and estimates laid before the Colonial Legislature with regard to cost?—Yes, very minute and elaborate statements were made.

3245. And it was upon those statements and estimates that the Colonial Government were prepared to guarantee 5 per cent. dividend on the money invested?—It was so.

3246. And were the various Colonial Governments unanimous?—I believe, substantially and practically, they were. There were some trifling matters of detail upon which there were differences.

3247. The Committee may gather that there is a general impression throughout the Australian Colonies that telegraphic communication would be of very great advantage in developing the commerce of Australia?—There is, undoubtedly.

3248. Mr. *Brooks.*] Have all the Colonies joined in the guarantee, or has there been any exception?—My impression is, that they were all practically willing to combine substantially; there were some small matters of detail as to the respective quotas which each Government was to furnish on which they were not all agreed.

3249. Did South Australia join the guarantee?—I think so. I am not quite certain about South Australia, but I know that the other Colonies, Victoria, New South Wales, and Queensland, were, in fact, united.

3250. Do the present telegraphs extend to Van Diemen's Land?—No, they have failed, I believe; there is no telegraphic communication to Van Diemen's Land. They endeavoured to lay down a cable across Bass's Straits, but it was unsuccessful. It at present extends from Adelaide along the whole south-eastern coast to Rockhampton, in latitude $23\frac{1}{2}$ south.

3251. With regard to steam communication, you speak of the homeward passages as being very regular?—Yes, I think upon the whole, they are as regular as one can reasonably expect them to be. Those who have been the voyages and who know the difficulties, are disposed to make very considerable allowance, and to give a certain margin of time.

3252. Admiral *Seymour.*] If I understand you rightly, you say that there has been a line of cable attempted to be laid down across Bass's Straits?—Yes.

3253. Do you know the reason of the failure of that line?—I suppose there are difficulties in the sea; there is a very strong current which exists through those straits and the rough bottom, and probably there was some deficiency in the necessary amount of engineering skill. I am not prepared to say how that was, but it failed.

3254. At all events it was a failure, from the difficulties of the position and not from the difficulties of raising money?—No, I should say not.

3255. Mr. *Marsh.*] You have been the voy-
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Nicholson,
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age, have you not, to Australia and back?—Yes, by steam both ways.

3256. And you think that everything is done to keep time that can be done with the existing ships?—I do; that is my opinion, but I dare say that a great many persons differ from me. I am disposed to make great allowance for the inevitable difficulties; but I know that there is great dissatisfaction on the part of many persons.

3257. The officers, you will agree with me, are exceedingly good?—Yes, in fact as good as

officers can be. I think the organisation of the service is really very surprising. I have travelled by the French vessels and various steamers, and I think that, on the whole, we have reason to be proud of the service as it is performed by the Peninsular and Oriental Company. I should like to see the cost cheapened if it could possibly be done; it is rather too high; it is a luxury, and it is only people who have means that can avail themselves of the passage by steam.

FRANCIS GISBORNE, Esq., Examined:

F. Gisborne,
Esq.

3258. *Chairman.*] I BELIEVE you have given considerable attention to the subject of establishing telegraphic communication between India, Singapore, China, and Australia?—Yes, I have. I may state that I obtained powers from the Turkish and Egyptian Governments in the year 1856 to lay down the Red Sea and India cable. Three years later, in 1859, I made an arrangement with the Dutch Government under which the cable was laid between Singapore and Batavia. I went to Australia in 1859; and in that year, and in 1860, I carried on negotiations with the various Australian governments, under a letter of introduction from the Secretary of State for the Colonies, with a view to their giving subsidies for the line from the then existing terminus of the Australian system at Brisbane, in Queensland, to the east point of Java, where the Dutch lines terminated. I may state that the Legislature of New South Wales, which was the first applied to, passed a resolution empowering the Government to give a sum not exceeding 9,626 *l.* per annum for 21 years to a company that should establish the lines that I have sketched out. The Legislature of Victoria passed a similar resolution, empowering their Government to give a subsidy of 13,000 *l.* a-year for 21 years to the same company; and the Governments of all the other Colonies, excepting South Australia, wrote letters promising to make up the contributions of New South Wales and Victoria to 35,000 *l.* a-year, being 5 per cent. upon the estimated cost of the line. The reason that South Australia refused was not from any lukewarmness in the project (for I believe it was one of the Colonies that was most anxious for it), but because they wanted to establish a land telegraph from the head of Spencer Gulf, in South Australia, to Van Diemen's Gulf, on the northern coast of Australia. Their anxiety for establishing that land telegraph was in order to prepare the country for pastoral occupation, but at that time the prospect of such a land telegraph being established being very remote, I refused, on the part of the company, to fix the terminus of the sea line at Van Diemen's Gulf, and said it should be at Brisbane.

3259. To what company do you allude?—They were merely a set of promoters, who gave me a letter, saying that they would undertake to find the capital upon such and such terms being granted. In 1860 I returned to England; and I found that the Red Sea line had failed, and the whole question of submarine telegraphy was thrown into the utmost confusion and bad odour, so that we could make no use of the powers that had been granted to the Australian Governments by their several Legislatures. At that time, although the Singapore and Batavia

cable had been laid, there was no line between Rangoon and Singapore. Although the communication between Bombay, Calcutta, and Rangoon has been completed ever since 1857, the extension from Rangoon has never been at all carried out, excepting to Moulmein, which is practically the same distance from Singapore.

3260. Are the Committee to understand that the communication has not been completed between Moulmein or Rangoon and Singapore at the present time?—The Indian telegraph system does not extend beyond Rangoon and Moulmein at the present moment.

3261. What steps have been taken for establishing a communication between Rangoon and Singapore?—In December 1860 the Malta and Alexandria cable was shipped to be laid between Rangoon and Singapore, but an accident to one of the cable ships on her voyage out caused the loss of the favourable season for laying, and compelled a change in the destination of the cable which was then laid between Malta and Alexandria. The original destination of the cable was for Falmouth and Gibraltar. Since then I have been in constant communication with the India Office and the Treasury upon the subject. In 1858, my late brother, Lionel Gisborne, who planned out the telegraphs in question, had already communicated with the India Office. The answer which Sir Charles Wood has invariably given since 1862 has been this; that he would not charge the revenues of India in respect of any line between Rangoon and Singapore, so long as that line was merely to be a local line between India and Singapore; but that if we applied to the Chancellor of the Exchequer to assist us for an extension of the lines from Singapore to China in one direction, and to Australia in the other, he would then undertake that the Indian Government should either make a line between Rangoon and Singapore themselves, or assist a company to make it. In fact, he seems to have been afraid that the line between Rangoon and Singapore would not pay *per se*, and would therefore become a charge upon the revenues of India; but that if he got positive security on the part of the Treasury that the lines beyond Singapore would be made, then he thought that any guarantee or subsidy would be nominal, and he would be willing to assist the line between Rangoon and Singapore; I suppose that that was his reason, but he never stated so.

3262. Did you act upon the suggestion of Sir Charles Wood, and make an application to the Treasury?—Yes; we made several applications to the Treasury, and we were invariably refused. The fact is, that the Treasury and the Government of India having lost about 36,000 *l.* a-year for 50 years upon the Red Sea line, one-half

to be paid by each for that term, there has ever since been a very strong feeling against submarine telegraphs. That was an absolute guarantee to be paid whether the line worked or not; and although ever since the failure of that line I never asked for anything like an absolute guarantee; but for a subsidy strictly conditional upon the working of the cables, yet I could not make them distinctly appreciate that. At any rate, in the result they have invariably refused to assist the lines beyond Singapore, and that refusal was contained both in letters from the Treasury to myself, and in their letters to Sir Charles Wood. On receiving the intimation from the Treasury that they would not assist lines beyond Singapore, Sir Charles Wood wrote to us to say that he would not assist the line between Rangoon and Singapore; the first letters were before the existing telegraph to India was completed. Since that telegraph was completed, we thought we should have a good opportunity of renewing the negotiations, but we have had the same answer both from the Treasury and from the India Office.

3263. So that at present the negotiations stand thus; that the Treasury and the India Board have both declined to make any advances, either in the shape of money or guarantee for establishing telegraph communication beyond Singapore?—Yes, they have refused.

3264. Is it your opinion that the establishment of telegraph lines as contemplated by you, or the promoters with whom you are associated, would be a great advantage in a mercantile point of view, both to Singapore, to China, and to Japan?—The best answer to that is, for me to put in an abstract of the trade and shipping which will be accommodated by the proposed lines between Rangoon, Singapore, China and Australia; I have prepared this abstract from official returns, and I believe it is perfectly correct. I have only included in it the trade and shipping which really will make use of the telegraph (*handing in the same*). It is evident that Singapore, China, and Australia will be under a serious disadvantage as compared to India, if the telegraph is not extended to those countries.

3265. Mr. Stansfeld.] Are the Committee to understand that the communications from the Treasury and the India Office to which you have referred, have already been made public?—Yes, they have all been published in the Blue Books relating to Telegraphic Communication between India, Singapore, China, and Australia, and there are four of them. The first Blue Book was printed on the 5th of July 1860; that was the third report of the Packet and Telegraph Committee; the second on the 8th of February 1864; the third on the 13th of June 1864; and the 4th on the 7th of April 1865. It will be seen, that so long ago as 1858, the then Indian Government made certain conditional promises to carry out the Rangoon and Singapore line, which promises have never yet been fulfilled. They were conditional, upon the extensions beyond Singapore being also carried out, which extensions were not carried out. But I may state, that if we had had greater security as regards the Rangoon and Singapore line, the extension to Australia, at any rate, would have been carried out. But whenever the Dutch Government applied to Sir Charles Wood to ask him his intentions with regard to the Rangoon and Singapore line, his answer to them was, that no decision had

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been come to; and in that respect his answer to them did not completely correspond with his answer to me; his answer to me being, that the Rangoon and Singapore line would undoubtedly be secured if the extensions beyond Singapore were secured, whilst his answer to the Dutch Government was simply that no decision had been come to with regard to Rangoon and Singapore.

3266. *Chairman.*] Could any decision be come to?—No decision was ever come to, or at least carried out, about the Rangoon and Singapore telegraph by Government. This placed me in a great difficulty in my negotiations with the Dutch Government, because they thought the wanting link was in a state of the greatest uncertainty.

3267. Are the papers which you have handed in with reference to the trade and commerce as between England and China, or with other places?—They relate to the commerce and shipping of the Straits settlements, including Singapore, Penang, Rangoon, Moulmein, also of China, Java, and Australia, with the whole world.

3268. Are you prepared to state in brief the annual value of the trade between India and China, and England and China, at the present time?—As between India and China, the last returns that I have been able to get are for 1862, and the amount is 14,863,297 *l*.

3269. That is for the trade out and home between India and China?—Yes. The whole of the trade exports and imports between India and China, and between England and China, for the year 1864, is to the amount of 20,662,332 *l*.

3270. Do those returns include bullion?—Yes, they include bullion.

3271. Can you state what proportion of that amount which you have stated is bullion, and what merchandise?—The total treasure imported into China from the United Kingdom, India, and other countries in 1864 was 11,628,339 *l*.

3272. Can you state how much bullion is from India, and how much is from England?—From England to Hong Kong it is 5,287,075 *l*. The exports of treasure from India to China in 1862 were 15,358 *l*.

3273. Can you inform the Committee what was the export of bullion from China to India?—From China to India in 1862 it was 995,869 *l*. There was 4,324,865 *l*. of treasure imported in 1864 into Hankow, but it does not appear whence it came.

3274. Have you any facts to bring before the Committee which would tend to establish your opinion that the completion of telegraphic communications with China would lead to a great extension of commerce with that country?—There has been a great deal of commercial evidence upon those points, with regard to the trade between England and India, and of course all that evidence is applicable with still greater force to the countries more distant; such as Singapore, China, and Australia, for the simple reason that the more distant are the termini which are connected by telegraph, the greater is the difference between the course of telegraph and the course of post, and the greater therefore the necessity and advantage of using the telegraph.

3275. Have you any information to give the Committee with regard to the trade and commerce of Japan with India and England?—The trade of the 13 open ports in China with Japan, in 1864, was 1,742,870 *l*.

3276. Have you any information with regard to

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F. Gisborne,
Esq.25 May
1866.

F. Gisborne,
Esq.
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to the direct trade between Japan and England? —In 1864 the trade between the United Kingdom and Japan in imports and exports was 2,090,811 *l*.

3277. To what ports in China do you propose to carry the telegraphic communication from Singapore?—From Singapore the line is proposed to run along the coast in a depth of from 40 to 50 fathoms, with intermediate stations at Saigon, the French settlement, the island of Hainan, Hong Kong, Amoy, Foo-Choo-Foo, Shanghai, and so on, to Tien-Tsing, at the mouth of the Peiho, with a land line thence to Peking, and with a branch from Shanghai to Nangasaki, in Japan. I wish particularly to impress the Committee with this, that nearly the whole of the lines that I have sketched out, from Rangoon to Singapore, China, and Australia, can be laid in shallow water, and where the cable will always be easily raised for repairs.

3278. What is the greatest distance, from point to point, that the cable would be submerged; say from Singapore to Shanghai?—From Singapore to Saigon is 643 miles; from Saigon to Hainan is 620 miles; from Hainan to Hong Kong is 360, and they each are moderate distances.

3279. Has the whole of that line been surveyed with a view to laying the telegraph?—Between Rangoon and Singapore, and from Singapore to near Peking, and to Nangasaki, the whole of the line has been so well surveyed that one would hardly require additional soundings to be taken, except such soundings as could be made by the cable ship itself.

3280. What is the character of the bottom throughout that vast line?—The character of the bottom is extremely favourable everywhere, excepting between Penang and Singapore. There is a distance of 373 miles between Penang and Singapore, where the depth does not exceed 25 fathoms.

3281. What is the bottom?—The bottom is sand and mud, and so far it is quite favourable; but ships anchor there in the straits in great numbers, and the cable would have to be a very heavy cable, and laid as much as possible in places where ships would be least likely to anchor; but I consider that that would be the most dangerous portion of the whole telegraphic system which I have described.

3282. Have you proposed any negotiation with the French Government with regard to the telegraphic cable at Saigon?—Yes; we wrote to the French Government, and I have a letter which, with the permission of the Committee, I will put in evidence from the French ambassador, stating that the French Government would give its permission to land our cable at Saigon, though at present it would not give us financial assistance.

3283. Admiral *Seymour*.] What would be the objection to having the wire from Moulmein to Singapore on shore, along the edge of the shore?—The British territory finishes about the 10th degree of latitude, and I understand that a great deal of that country is uninhabited, and it would be very difficult to overlook that part of the line; for the remainder of the distance, the country is in the hands of various native princes.

3284. All along the straits is it not as easy to lay the line as it possibly can be?—Yes; a submarine line costs, of course, about three or four times as much as a land line, but the advantages of a submarine line are these, that you main-

tain your control over all your communication, whereas in the case of a land line carried either through uninhabited countries or through countries which are in the possession of other powers you could not secure the maintaining of your control over it; and it is a question of whether it is worth while going to three or four times the expense for the advantage of being certain of maintaining your control over your communication; it is simply a question of that.

3285. *Chairman*.] Will you hand in to the Committee the French Ambassador's letter?—I have here various documents, amongst which are the French Ambassador's letter, and also the answer given by Sir Charles Wood to a deputation which waited upon him in 1863.

3286. Has that answer of Sir Charles Wood been published in the blue books?—No, that is a verbal matter. Then there is the answer of Sir Charles Wood to Baron Bentinck, who put the question to him on behalf of the Dutch Government. The third is a letter from the Board of Directors of the late East India Company, dated July 14, 1858, about the Rangoon and Singapore line, showing the origin of the matter; and the fourth is a letter from the Foreign Office, dated 16th April, 1866, stating that the Chinese Government had refused permission to make the line between Kiakhta and Peking. There is another document which I have prepared, and which has been corrected by Sir Henry Rawlinson, showing the distances through Turkey and Persia of the existing telegraphs between England and India; and then comes the French Ambassador's letter, to which I have referred.

3287. To what effect is that letter from the French Ambassador?—It gives permission to land the cable and establish a station at Saigon.

3288. But the French Government decline to give pecuniary aid for the present?—Yes; they decline to give pecuniary aid for the present.

3289. Did you apply to the Colonial Office for any aid with reference to the Island of Hong Kong and telegraphic communication with China?—No.

3290. Have you made any application to the Chinese authorities for aid in completing that line of telegraph?—No.

3291. But have you received a communication that the British Government have made application and been refused, so far as laying down the line across a certain portion of China is concerned?—I believe that the Russian Government and a private company applied for permission to establish a line between Kiakhta and Peking, and that the Chinese Government refused them both; I believe Mr. Reuter made application. That line could only be a political line, unless extended to Shanghai and Hong Kong.

3292. It appears from the paper which you have put in, that the Chinese Government have refused a concession permitting the establishment of telegraphic communication between Kiakhta and Peking?—Yes.

3293. With regard to the extension of the telegraphic line from Singapore to Australia, have you made any soundings, or can you give the Committee any information with regard to the difficulties or facilities of laying down a wire?—From Singapore to Java there are no difficulties, except such as arise from the shallow nature of the sea. The sea is perfectly well sounded, and the maximum depth is about 23 fathoms, which is about the same depth as the North Sea; and

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of course, if a ship anchored in that depth, which it could do, the cable might be broken by the anchor.

3294. Are the Dutch Government willing to aid you in establishing a line between Singapore and Java?—Since the failure of the cable which they laid on their own account in 1859, which failed after working for about a year, they gave us a subsidy of 8,500 *l.* a year for 30 years, for laying a new cable between Singapore and Batavia; that subsidy has technically lapsed.

3295. Has the cable been laid?—No; we could make no use of that subsidy in consequence of the absence of the link between Rangoon and Singapore; that has been the door to the whole system, which has been kept shut by the refusal on the part of the India Board and the Treasury to secure that line.

3296. Would the Dutch Government still be willing to pay the proposed 8,500 *l.* annually, if you could lay down that cable?—I could not answer that question positively; I know that the Dutch Government in Europe have authorised the Dutch Government in Java to make a land line from Java and through Sumatra to a place called Syak, which is nearly opposite Singapore; and if that land line were made, it would, to some extent, supersede the necessity of the proposed submarine line between Singapore and Batavia; I say to some extent, because it would be always advantageous to have the communication in British hands.

3297. Then, as regards the communication between Batavia and Australia; has that route been surveyed?—There are land telegraphs through Java, and as regards communication from the east end of Java to Macassar in Celebes, there are but few soundings; but still there are enough to show the general depth of the sea, and a cable could probably be laid in about 100 fathoms water to Celebes; between Macassar and the Portuguese settlement of Delli in Timor, there is not a single sounding taken, and we do not, of course, know what the depth is.

3298. What distance is that?—The distance is 420 nautical miles from Celebes to Delli, and for those 420 miles there is not a single sounding taken. Then from Timor to the northern coast of Australia, say to Adam Bay; in fact, the whole way to the head of the Gulf of Carpentaria, there are soundings taken; but there are very few between Timor and the nearest point of the coast of Australia; still a cable could probably be laid in a maximum depth of 100 fathoms for that distance, and along the coast of Australia, you could choose your own depth pretty nearly, and from Port Essington, to the head of the Gulf of Carpentaria the depth is about 40 fathoms.

3299. What is the character of the coast along the eastern coast of Australia with regard to telegraphic communication?—A land telegraph has been proposed to be laid along the eastern coast to come in at the head of the Gulf of Carpentaria, which the Queensland Government has undertaken; in fact, the materials for the line from Port Denison, where the Queensland telegraphs terminate, to the head of the Gulf of Carpentaria are already on their way to Australia, and it is under construction.

3300. Then when the submarine cable is brought to the head of the Gulf of Carpentaria your line ceases?—Yes, the sea terminus of our line will cease at the head of the Gulf of Carpentaria, and if the proposed land line from the head

of the Gulf of Carpentaria to Adam Bay is made by the Government of South Australia before our line is laid, the sea terminus of our line will be at Adam Bay, which is a much nearer point to Timor.

3301. Do you learn that the Australian Government are willing to make the internal lines to communicate with your sea line in the Gulf of Carpentaria?—Yes, the materials for a line as far as the head of the Gulf of Carpentaria, which is our proposed terminus, are already on their way to Australia.

3302. That will be laid whether your line is completed or not?—Yes, that line will be laid whether our line is completed or not, for local purposes.

3303. Can you give the Committee any information with regard to the commercial importance to Australia of developing this telegraphic communication?—The value of the external trade of Australia in 1864, which would make use of this telegraph was 38,589,979 *l.*

3304. That was as between Australia and all the world, was it not?—That was as between Australia and all the world, except the South Sea Islands, Chili, and the Cape of Good Hope.

3305. Does that amount include bullion?—Yes, that includes bullion.

3306. Can you give the Committee a return distinguishing the amount of bullion from merchandise?—The exports of gold from Australia in 1864, were 2,656,971 *l.*

3307. Mr. Marsh.] You mean ounces, not pounds sterling, do you not?—I have it as pounds sterling; it is the amount of the imports from the whole of Australia into Great Britain in 1864, and I have got that item down as 2,656,971 *l.* In previous years, the export of bullion from Australia, was rather over 6,000,000 *l.*

3308. Is it your opinion that between England and Australia the present lines of communication are sufficient for the full development and extension which you propose?—The whole of the communication between England and India has only been in existence since March 1865; that is to say, for very little more than a year, and out of the three lines which exist there is only one which is in actual use, namely, the one through Constantinople, and so on, through Asia Minor to the head of the Persian Gulf; but if the two other lines were brought into use; I allude to the line through Russia and Persia, and to the line through France and Italy, *viâ* the Malta and Alexandria cable to Egypt, and thence to Diarbekir in Asia Minor; I say, if those two other lines were brought into use, and especially if additional wires were added to them which could be done at a very small cost, I think, that speaking for some years to come, there would be a sufficiently good communication between England and India.

3309. And sufficient to carry the increased use that would be made of them by reason of the extensions which you recommend?—Certainly; you could put 12 wires to each of those three lines if necessary; and there is no doubt that speaking of the mechanical power of those lines there would be wires enough to carry many times the amount of messages that will ever come. It is more a political question whether a sufficiently good international arrangement can be made with Turkey and Persia to secure the efficient administration of the lines.

3310. What, in your opinion, is the main hindrance

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hindrance to the establishment of the line which you propose, and believe to be so beneficial to the commerce of this country?—The main hindrance ever since 1859, when I went out to Australia, has been the absence of the first link, namely, that between Rangoon and Singapore—that has been the stumbling block throughout in all my negotiations with the Dutch, the Australian, and the French Governments, and in my private negotiations with people in the city. It was of no use making the extensions as long as that link was wanting, and as long as any great degree of uncertainty was hanging over it.

3311. And, according to your opinion, it must be charged upon the Government and the India Board that they have been the main obstacles to the extension of those lines?—There is no doubt that it is the vacillation of the India Board and the Treasury with regard to the Rangoon and Singapore line, which has created the main if not the only difficulty with reference to the extensions beyond Singapore.

3312. Has either the Indian Government or the English Government made any surveys with reference to the practicability of any of those lines?—As I stated before, with the exception of the sea between the east end of Java, Celebes, Timor, and the northern coast of Australia, there are sufficient soundings for preliminary purposes; and last year we applied to the Admiralty to have those soundings taken between the east end of Java, Celebes, Timor, and the northern coast of Australia, and they refused to take them. They estimated the cost of taking those soundings at 24,000 £, and they wanted the Company to pay it. We said that we were merely a registered company, registered for the purposes of negotiation, and had no capital, and could not do it; besides which it was a work which could be better done by the Government, and which had always been done by the Government, for companies in previous instances—in the case of the Atlantic cable for instance, and in the case of the Dardanelles and Alexandra line, which was at one time proposed and partly carried out, and in other instances; and I trust, if I may be allowed to say so, that the Committee will recommend the Admiralty to take those soundings which we required of them last year. The Dutch Government promised to take those soundings, but the promise was never carried out; and I think if application were made by the British Government to take those soundings between Java and Australia at the joint expense of the two Governments, the Dutch Government would agree to take them, and in that way the soundings would be taken at much less expense.

3313. Do you know, as a fact, that the British Government took the soundings for the Atlantic telegraph cable?—Yes, I believe so, certainly. The Dutch Government, having ships on the spot, I presume that those soundings could be taken at a less expense than if Her Majesty's Government commissioned a ship for that express purpose.

3314. Are the Committee to understand that you do not express any confident hope that those extensions which you propose to Singapore, Batavia, Japan, and Australia, can be accomplished, unless you have direct pecuniary aid from the British and other Governments?—I am perfectly certain that unless we get pecuniary aid they cannot. The fact is, that although those lines are all of them shallow water lines, the public do not distinguish between deep sea lines and

shallow water lines to a sufficient extent. The deep sea lines have invariably failed after working for a year or two, and it is extremely difficult to point out that those lines are shallow water lines; people do not appreciate that distinction.

3315. Is it your impression that a company could be formed and the money found in case the Government would guarantee a moderate rate of dividend as long as the line is working?—I have not asked for a guarantee; I always have asked for an annual cash payment of 5 per cent. upon the cost of the line; this subsidy to be worked off by the gratuitous transmission of the State messages to the extent of the subsidy in each year at a tariff to be mutually agreed upon between the Government and the company.

3316. And in case the line was not in operation, what then?—The subsidy to cease; the subsidy to be paid day by day only as the line was in operation. When a deputation waited upon Mr. Gladstone upon this subject, in 1863, he stated that as far as he was informed of the views of the Government, he thought that in the place of a subsidy the Government would prefer contributing a portion of the capital. I think that would equally facilitate the raising of the remainder of the capital; for it is evident that if the Government contributed, say one-third of the capital, the contractors, if necessary, would certainly take a quarter, and the remainder, I think I can undertake to say, would be raised by private subscription, although it is almost hopeless to appeal to the public for that purpose. If you talk about a line between Rangoon and Singapore, they tell you that the Atlantic cable has failed.

3317. Is it not the custom of most Governments who avail themselves of your communication, to give pecuniary aid to the promoters of the various lines?—The existing lines are all in Government hands, except in the case of some British lines in the Mediterranean; and so far as telegraphs have been carried out to the East by companies, they have all been assisted by the British Government. For instance, the line between Malta and Sicily, the line between Otranto and Corfu, and the Red Sea and Indian line which were carried out by private enterprise, were all assisted by the British Government.

3318. So that in seeking the aid of the British Government, you are merely acting in accordance with the aid which is usually given by other governments for establishing telegraphic communication?—By the British Government itself.

3319. Your impression is, that unless such aid is given the telegraphic communication will not be established?—Most decidedly so, and not for an indefinite number of years to come. In fact, if I may be allowed to state so, I should have thought that the British Government should insist upon taking a part in the establishment of those lines, and for these reasons, that it is only by assisting those lines financially that the Government can secure to itself, in the first place, priority of transmission for State messages; and, in the second place, a control over the tariff, both for State and for private messages, which control would be a very great protection to the public, because there is no doubt that those lines will be virtually monopolies for many years to come.

3320. Can you state to the Committee why the Red Sea line failed?—I can only state from general report. I believe that the Red Sea cable ought to have been from four to eight times

as heavy as it was; it only weighed 21 cwt. per knot; that the outer iron wires ought to have been protected by some substance to exclude the action of the sea water; and that it ought to have been laid, as it was originally intended, within 100 fathoms, instead of as it was laid, by compass, in a straight direction from station to station, taking the shallow water and the deep water just as it happened to come, so that out of the whole distance between Suez and Kurrachee, 3,000 nautical miles, speaking roughly, about half of it was laid within 100 fathoms and half in a greater depth than 100 fathoms, each section being what I may call intermixed with partly deep and partly shallow water. The result was, that as soon as a fault occurred, if it happened to be in shallow water, it was easily repaired, but if it happened to be in deep water it could not be repaired, and the whole line was rendered useless. It was in the early days of submarine telegraphy that that line was laid.

3321. Are you prepared to state to the Committee what would be the entire cost of laying the line which you propose from Rangoon to Singapore, thence to Saigon, and thence to the various ports in China and Japan, and also the expense of carrying the line south to Australia?—To lay a cable of four tons to the nautical mile for 60 per cent. of the distance, and seven tons to the mile for 40 per cent. of the distance, it would cost 400 *l.* per nautical mile, which, for the line from Rangoon to Singapore, would amount to the sum of 500,000 *l.*, and from the east end of Java to Adam Bay, on the north coast of Australia, it would also amount to 500,000 *l.*, the distance being exactly the same, 1,200 nautical miles, in round numbers, in each case.

3322. And the cost from Singapore to Saigon would be how much?—From Singapore to Shanghai, perhaps you will allow me to give it in that way, it would be exactly 1,000,000 *l.*, the distance being 2,500 nautical miles.

3323. And thence to Nagasaki, how much would it be?—From Shanghai to Nagasaki is 447 knots.

3324. Is there any other information which you wish to give to the Committee?—I have prepared statistics of submarine telegraph lines which have been hitherto laid, with some observations on each. I have also a letter from the Brisbane Government, stating that the line to the Gulf of Carpentaria will be completed immediately. I have also an extract from the "Java Courant," stating that the line through Sumatra has been sanctioned, which extract was sent to me from the Colonial Office at the Hague; and I have an account of a conversation which I had with Mr. Groll, who was the engineer who superintended the laying of the Singapore and Batavia cable, with reference to the causes of the failure of that cable.

3325. Can you state in brief what were the causes of the failure of that cable?—The Singapore and Batavia cable was exactly the same as the Red Sea and India cable, weighing about 22 cwt. to the nautical mile; and instead of being laid in the open sea east of Banka, as was recommended by the contractors, it was laid in the narrow straits from Singapore along the coast of Sumatra to the west of Banka, and thence to Batavia, where the depth is only about 11 fathoms, and where the currents are excessively strong, and which is one of the greatest places for anchorage in the world. The consequence was,

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that the cable was broken 30 to 40 times a year by anchors, and the iron wire rusted away, and the cost of repairs was so great that it had to be abandoned.

3326. Mr. Brooks.] From your experience do you apprehend that a cable could be safely laid from Singapore to Batavia without being hooked?—I was informed by the Dutch Admirals, that if it is laid in the open sea east of Banka at a depth of 23 fathoms, it would not be hooked, because ships very seldom, or never, anchor there; it is entirely a question of whether ships anchor there or not.

3327. With reference to the importance of Australia, are you aware of the population of Australia?—The white population is, I believe, over 1,000,000; I do not know exactly what it is.

3328. Does that population consist of Europeans colonial born?—Yes.

3329. Exclusive of Chinese?—Yes, precisely so.

3330. With regard to the import of gold from Australia, which you stated to be 2,656,971 *l.*, are you not aware that it has never been less than 7,000,000 *l.* or 8,000,000 *l.* since 1854?—I was surprised at the figures myself, but I took them from the Blue Book. The amount I stated is correct for 1864, but in previous years it exceeded 6,000,000 *l.*

3331. As regards the communication between India and Australia, do you consider it to be a political question as well as the communication between England and Australia?—No doubt, in case of any European war, the English Government could protect the Australian colonies very much more efficiently, and at a much smaller cost, in case a telegraph existed, because it is quite evident that in that case the British Government, having the exclusive control over the telegraph, could regulate the movement of the troops and of the navy, and a foreign government would not have the same advantage with respect to any force which they might have in those seas.

3332. Do not you consider that it would have been of importance, in the late disturbances in New Zealand, if that communication had existed?—I should think that if that communication had existed, the war would not have lasted one-third as long as it did, and would have been much more efficiently carried out.

3333. Are you aware of the amount which the Australian colonies would contribute to the protection of this telegraph line?—When I was out in Australia, in 1860, they proposed to contribute a subsidy of 35,000 *l.* per annum for 21 years, the basis being five per cent. upon the cost of the line.

3334. Mr. Marsh.] You assume that the sea cable would go to the head of the Gulf of Carpentaria; would it not be possible to take it to the nearest north point of Australia, and thence by land?—Quite possible.

3335. And it would be cheaper, would it not?—Certainly; and the Queensland Government are in communication with the South Australian Government with regard to making a line from the head of the Gulf of Carpentaria to Adam Bay, which is the nearest point of Australia to Timor.

3336. And that line is completed now, is it not, the whole way from South Australia?—Yes; the line from South Australia *via* New South Wales and Queensland to the head of the Gulf of Carpentaria will be completed at latest by next year.

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3337. A land

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3337. A land line, you say, is much cheaper than a sea line?—I should think that a land line in those countries, is one-third of the cost of a sea line.

3338. If a land line gets out of order, it is more easily put in order than a sea line, is it not?—It is undoubtedly more easily put in order; but a properly constructed sea line ought not to get out of order for once in 20 times that a land line gets out of order.

3339. You have told me something of the trade between India and China in 1862, and also between England and China in 1864; have you any statistics of the French and American trade to China in those years?—Yes, it is in this paper which I have handed in. I may state that I have here a letter, dated 1862, from the Minister of the colonies at the Hague, stating that he had ordered soundings to be taken between Java and Timor (*delivering in the same*).

3340. *Chairman.*] Are those the soundings upon which you have acted with reference to the details of laying the cable?—Yes, those are the soundings with reference to which we were in communication with the Admiralty last year.

3341. Have you any further remarks to offer to the Committee?—I wish to point out to the Committee, that at the present moment the British Government, as distinguished from the Indian Government, does not contribute one farthing towards the line between England and India, which is at present in actual use; I mean the line *via* Constantinople. The Indian Government paid for the Persian Gulf line, and that is the only portion of the whole distance which is contributed to, either out of the British or Indian revenues.

3342. *Mr. Stansfeld.*] Did I rightly understand you to speak of the vacillation of the Indian Office in your negotiations with them?—No; if I used the word vacillation, I used a wrong term; ever since 1858, down to the present moment, they have always given us the same answer. I meant hesitation rather than vacillation.

3343. But what evidence of hesitation is there in the documents to which you have referred; have you, first, the answer of Sir Charles Wood to you?—The answers are all contained in those Blue Books.

3344. But will you turn to his first letter, and give the date, and also the grounds upon which he declines to accede to your proposals?—I believe that the first letter which I received from Sir Charles Wood was dated the 29th of May 1862, which is published at page 56 in the Blue Book, dated the 8th of February 1864.

3345. Will you state the reasons for which Sir Charles Wood declines to accede to your proposals?—The letter is to this effect. "Sir, I am directed by the Secretary of State for India in Council to acknowledge the receipt of your letter of the 9th instant, and to acquaint you, in reply, that Sir Charles Wood is not prepared to undertake the construction of a telegraphic line between Rangoon and Singapore. He is of opinion that the construction of that line can only be considered with the object of its forming part of much more extended lines beyond Singapore. Any question of that magnitude can, however, only be dealt with by the Imperial Government; and with the view to such an object, any application should be addressed to the Lords of the Treasury, to whom your letter has accordingly been forwarded."

3346. Is there anything in any subsequent correspondence with the India Office inconsistent with the ground taken up in this letter?—On the contrary. Sir Charles Wood's answer is quite consistent with the original intimation on the part of the then Indian Government in 1858, and quite consistent with all the subsequent communications.

3347. Then there is no evidence either of vacillation, or of hesitation, but of a conclusion unfavourable to your project?—I cannot quite say that, because the India Office has, through-out, admitted that that line must be made if the lines beyond are certain to be made; and I think that, after the Dutch and Australian Governments had actually voted subsidies for the lines beyond Singapore, a more favourable answer might have been given. Therefore I think there was considerable hesitation in undertaking that line, because some of the conditions imposed by Sir Charles Wood were fulfilled by the action of the Dutch and Australian Governments.

3348. But the last paragraph of the letter which you have read is to this effect: "Any question of that magnitude can, however, only be dealt with by the Imperial Government; and with a view to such an object, any application should be addressed to the Lords of the Treasury, to whom your letter has accordingly been forwarded"?—I have only to state that the Dutch Government were willing to carry out the Singapore and Batavia line without assistance from the British Government, and that the Australian colonies, with the single exception of Victoria, were also willing to carry out the line from the east end of Java to the north coast of Australia without the assistance of the British Government. In the Legislative Assembly of New South Wales there was a distinct motion made, that the assistance of New South Wales should be made conditional upon the Imperial Government assisting them, but that motion was negatived. In Victoria a similar motion was made, and the Government of the day very reluctantly gave way to it; the fact was, that when the thing came before the Parliament of Victoria, the Red Sea line had failed, and the whole question was thrown into great doubt; and the Government of the day, although opposed to it themselves, gave way to the motion: but none of the other colonies, except Victoria, made the Imperial assistance any condition whatever to their assistance being given: and I feel no doubt that Victoria would also withdraw that condition.

3349. Do you not see that the question of any Government assistance to lines beyond Singapore is an Imperial, and not an Indian question?—I do not see that at all as regards all the lines; I think that the line from Singapore to China is an Imperial question, and that we should want the assistance of the Treasury; but with regard to the line between Singapore and Australia, we have never asked for Imperial assistance, except when Sir Charles Wood told us to ask for it, and then we, very unwillingly indeed, asked Mr. Gladstone for assistance for the line to Australia; we did so merely at the dictation of Sir Charles Wood. We believed that we could carry it out, and we believe that we can still carry it out without Imperial assistance.

3350. *Mr. Marsh.*] Do you know whether the Queensland Government is sending a mail steamer by way of Torres Straits to Singapore?—Yes; the Queensland Government charter steamers to

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run between Brisbane and Batavia, and has advertised in the newspapers in this country for tenders for a line of steamers between the same points.

3351. That would alter the distance that the steamers would have to go, it being a much shorter distance than going to Point de Galle?—I do not know how that may be.

CHARLES WELLINGTON HOWELL, Esq., further Examined.

3354. Mr. Marsh.] Will you state to the Committee the distance from Sydney to Batavia?—I have not the distances divided in that way; I have the distances between Sydney and Point de Galle by the present route, as compared with the distance from Sydney to Point de Galle, calling at Brisbane, Cape York, Copang, Batavia, and Singapore.

3355. Would you be able to supply in your evidence what the distances are?—Yes; from Brisbane to Batavia the distance is 3,460 miles, and the distance between Sydney and Brisbane is 500 miles.

3356. I mean by way of Torres Straits?—I am taking here the actual performance of this ship which came up the other day, the "Sou-chay."

HENRY CHARLES FORDE, Esq., further Examined.

3360. Chairman.] I BELIEVE you are by profession a civil engineer?—Yes.

3361. Have you given attention to the subject to which the inquiry of the Committee is directed, with regard to telegraphic communication with the East?—I have been for a good many years connected with those projected cables in the East as well as those between England and India.

3362. Have you visited the East in reference to this subject?—I have never been further east than Kurrachee.

3363. Will you state to the Committee, as far as your knowledge extends, what are the engineering facilities or difficulties in laying down the proposed extension from Rangoon?—Between Rangoon and Singapore it appears to me, judging from the chart and from information which I have had from people who have lived in that part of the world, that it would be very easy indeed. The nature of the bottom is very favourable and the depth of the water is shallow; in parts probably rather too shallow, but certainly it is not too deep. Between Rangoon and King Island, which would probably be the first length, the maximum depth is 30 fathoms, the minimum depth 15 fathoms, and the mean would be about 20 fathoms. In the next section, from King Island to Penang, the maximum depth appears to be 45 fathoms, the minimum 20 fathoms, and the mean is about 35 fathoms. From Penang to Singapore the maximum depth is 50 fathoms, the minimum is eight fathoms, and the mean is about 25 fathoms.

3364. With regard to laying the telegraph through the China Sea up the Yellow Sea, have you any information to give to the Committee?—The bottom is exceedingly favourable; in fact,

3352. From Sydney to Singapore, or to Batavia, is a much shorter distance than from Sydney to Point de Galle?—Yes; but I do not know the exact distance.

3353. Chairman.] Are you conversant with the question of steam communication?—No, I am in no way conversant with it.

3357. Did she go by Torres Straits?—Yes; it is one of the experimental vessels that are being worked. We make the distance from Sydney to Galle by the present route 5,200 miles, and the distance from Sydney to Galle, calling at Brisbane, Cape York, Copang, Batavia, and Singapore, 6,104 miles; that is nearly 1,000 miles in excess.

3358. What would it be from Sydney to Batavia, where you join the Dutch steamer?—I have the distance from Brisbane to Batavia, which is 3,460 miles, but not from Sydney to Batavia; this is the actual performance of that vessel.

3359. Can you give the distance from Brisbane to Singapore?—No, I have not that division.

the whole way from Singapore by Saigon, Hainan, Hong-Kong, Amoy, Foo-Choo-Foo, Shanghai, to Nangasaki the greatest depth is 112 fathoms.

3365. How is that information obtained?—From the charts; and those charts appear to have been very carefully got up and sounded.

3366. Has the bottom been ascertained?—In parts it has been ascertained; and, from what I have seen, it is generally very favourably indeed. The mean depth of that line between Singapore and Nangasaki would be about 35 fathoms.

3367. Mr. Baillie.] From what sources do you derive your information?—From the Admiralty charts, which is the best information that we can get.

3368. Chairman.] Is there any other information that you would wish to give the Committee with regard to the engineering facilities of the proposed line?—I have drawn out a statement which I will hand in to the Committee, which gives the general features of each line and each section.

3369. That is not the result of your own observation?—It is the result of my own observations on the charts in laying down the line in the best directions. It is what we always do before we lay down cables; and it is the only way in which we can do so. This sheet, which I hold in my hand, contains all the information which I can give on these points, and I will hand it in, if the Committee will allow me (*delivering in the same*). I do not know that I have any further remarks to make.

3370. You have not visited Australia, I believe?—No, I have not.

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3371. *Chairman.*] You are a Civil Engineer, I believe, and a Fellow of the Royal Society?—Yes.

3372. Have you visited the East?—I have not.

3373. Have you any information which, in your judgment, would be useful to this Committee in arriving at a sound conclusion with regard to the extension of telegraphic communication to the East?—I have general information on the subject of submarine telegraphs, having for many years been connected with enterprises of that description.

3374. In what telegraphs have you been specially engaged?—I have been electrical engineer in reference to the Red Sea and India line, the Malta and Alexandria line, and many others. So far as I can judge of the nature of the seas through which the Indian extension lines would have to pass, I see no difficulty in establishing a good telegraphic communication through them. The seas are for the most part shallow; in many parts too shallow for secure submarine lines; but in such cases a remedy always is at hand, that of making the line sufficiently strong to resist anchorage.

3375. Have you informed yourself with regard to the temperature of the China and Yellow Seas?—There is no exact information on that point; but from the analogous conditions which obtain in the Red Sea, I have no apprehension of excess of temperature.

3376. Can you inform the Committee whether the temperature is higher in the Red Sea than in the Yellow Sea?—I believe that it would be found higher in the Red Sea. In fact, the Red Sea, I think, is the hottest sea almost on the globe, on account of the want of circulation from the great ocean.

3377. Did you find that the temperature was a material obstruction in laying the cable in the Red Sea?—Great care had certainly to be used to protect the cable against the sun during the act of laying. But the cause of the failure of the Red Sea line was purely mechanical, according to my judgment; the outer sheathing was insufficiently strong, and was of a nature to suffer very rapidly by corrosion. This was proved by my staff, who were sent out to co-operate in the repairs of the Red Sea line: the great difficulty that presented itself was that the iron wire, after nine months' immersion, had been completely rusted away in many places, and that in raising the line those weak places extended and destroyed the insulation.

3378. Do you attribute any part of that facility of decay, which you have experienced in the Red Sea line, to the high temperature of the water in which it was submerged?—Certainly, high temperature favours oxidation; but I consider that no cable should be without an external protection calculated to withstand corrosion.

3379. And that would apply equally, would it not, to the Red Sea cable, and to the cable proposed to be laid down in the China Sea?—It would equally apply.

3380. In the calculations and estimates which you have made with regard to these proposed extensions, have you provided for that extra coating?—Yes, and I would strongly recommend it. Having heard the evidence of Mr. Gisborne

and of Mr. Forde, I may say that I generally concur in what those gentlemen have stated with regard to the probable cost of the lines in question. Perhaps I may be allowed to call your attention to the land lines which lead to India; the lines through Russia have been mostly constructed by my firm, and I have also furnished the materials, and sent out some of the superintendents, who have erected the lines through Persia and Mesopotamia, under the late Colonel Patric Stewart.

3381. To which line do you allude; do you allude to the Northern Russian line, or to the line through Persia?—To the Southern Russian line as well as the Northern.

3382. Were you engaged in the Northern Russian lines?—They were nearly all constructed by my brother.

3383. Did the Chinese Government raise any objection to the continuing of the line from Amoor up to Peking?—It was the intention of the Russian Government to make that line, but I believe for the present that project has been abandoned.

3384. But they have a line of communication between Moscow and Amoor, have they not?—It is not quite completed yet.

3385. How far is it complete?—It is completed very nearly to Lake Baikal.

3386. What distance is it from where the line finishes to Amoor?—I cannot say for certain, because there is one party working from the Eastern Sea towards Lake Baikal, and another party is working from Russia towards Lake Baikal, and from the party working from the west no recent intelligence has been obtained; and it depends mainly upon their progress as to the time when the whole will be completed.

3387. You are not able to inform the Committee to what extent the line from Moscow to Amoor is not completed?—It is an inconsiderable portion, and it is the intention, I believe, to finish it this year. As to the quality of the lines through Russia I have a very favourable opinion, and the service on those lines is also well conducted.

3388. The whole of the northern line is, of course, a land line?—It is a land line throughout.

3389. Do you find that the telegraphs frequently get out of order?—Very seldom. In fact we have taken the superintendence of many lines for a period of 12 years, and it is a very rare occurrence that the lines are out of order.

3390. A land line is much more economical in its construction, is it not, than a sea line?—It is, perhaps, from one-third to one-fourth of the price.

3391. As regards the southern line coming to Persia, have you any suggestions to offer to the Committee?—With regard to the line from the Russian frontier to Teheran, I learn that it is in a very bad condition; it has been constructed of bad materials, and is badly worked; but the line in Persia is in very excellent condition, and I have lately been instructed to provide the materials for a second line, which will increase the security of communication through Persia still further.

3392. From Tabreez to Teheran is the line in bad order?—From Teheran up to the Russian frontier, to Erivan it is; on one occasion a great many

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many messages were accumulated at Erivan waiting the opening of the communication through to Teheran.

3393. Is that line in the hands of a private company, or under the management of the Russian Government?—It is in the hands of the Persian Government.

3394. So that the northern half of the line in the hands of the Persian Government is in bad condition, but the southern portion is in good condition?—All is in good condition except that portion from Erivan to Teheran.

3395. Have you any information to offer to the Committee with regard to telegraphic communication with Australia?—I have no detailed information upon the subject.

3396. Mr. Baillie.] Did you say that the Russian telegraph was completed as far as Lake Baikal?—Nearly; not quite.

3397. What is the distance from Lake Baikal to Pekin?—If I recollect rightly it is about 1,500 miles.

3398. What is the distance from Lake Baikal to the Amoor?—To the mouth of the Amoor, I think it is about 2,000 miles, but it is very difficult to give exact information, because the line has not been properly surveyed, and the map is our only guide for the distance.

3399. Mr. Marsh.] What is the distance from Lake Baikal to Moscow?—I can give no exact information upon that point.

3400. It is very nearly 3,000 miles, I am told?—About 2,500 miles.

3401. Chairman.] Have you been along the whole of that line?—No, not personally.

3402. Have you been at Moscow?—Not personally; my brother has been in charge there.

3403. Mr. Marsh.] Do you know what time a message takes from Lake Baikal to Moscow?—I have telegraphed from London direct to Tomsk, in Siberia, instantaneously; in fact, on all those continental lines we have established a means of transmitting messages mechanically and instantaneously; so that there is no difficulty whatever in speaking from London direct to any point upon the line, and I believe it is quite common now to speak to St. Petersburg and to Moscow without repetition. There is another point to which I would call the attention of the Committee; namely, that the difficulty now experienced in telegraphing to India arises almost entirely out of bad arrangements with the intermediate Governments, especially with the Turkish Government. With a connected line and a proper arrangement of staff and the instruments, there would

be no difficulty whatever, I consider, in speaking through instantaneously to Calcutta.

3404. Mr. Marsh.] Would a continuous wire all the way carry it?—Yes; by translation, as it is technically called, at points not above 800 miles distant from each other, instantaneous communication might be carried on with Calcutta if the lines were all in the hands of one administration, and furnished with instruments suitably arranged for the purpose.

3405. Fresh electricity would be necessary every 800 miles?—Yes; fresh batteries would be put into action.

3406. You mean that if the clerks stand by and look out for a message, they can transmit a message as fast as it is given?—The instrument which receives the message makes the contact for the next section, and so on.

3407. Then it never goes through the hands of clerks at all?—It never goes through the hands of a clerk, and there is no possibility of clerks' errors being introduced through translation.

3408. Between Moscow and Lake Baikal, is there that kind of machinery?—Yes, upon all the lines in Russia, and also upon Persian and Mesopotamian lines, including also the submarine lines to India, all of which have been constructed in the same establishment.

3409. Why should it not go direct from the same wire, without being transmitted; would not the electricity carry it the whole way?—The battery would not be sufficiently powerful to carry it the whole way.

3410. But by machinery you communicate one battery with another?—Exactly so.

3411. Chairman.] Have you any further information which you wish to give to the Committee?—All those different routes, the one by Alexandria, joining the Asiatic route at Diarbekir; the other through Constantinople, and a third through Russia, make the communication quite safe as far as Teheran, or as far as the Persian Gulf; but I think that a land line is wanting to connect Teheran with Gwadel, and a land line is now in course of construction, or rather of reconstruction, to connect Gwadel with Kurrachee; but from Gwadel to the head of the Persian Gulf our communications rest upon one thread, which is, I think, insufficient.

3412. That is in course of being improved, is it not?—It is contemplated to supply that deficiency. All these lines are, I believe, of very good construction, and quite capable of transmitting messages, at a sufficient rate to satisfy actual requirements.

ROBERT BROOKS, Esq., a Member of the Committee, Examined.

3413. Mr. Marsh.] You have been connected for many years with Australian commerce and shipping, have you not?—Yes, upwards of 40 years.

3414. You are aware that a great many more ships go to Australia with freight than come away?—A very much larger number indeed.

3415. That is on account, is it not, of the heavier bulk of the trade to Australia, and also on account of the emigrants?—Yes, there is a smaller proportion of goods coming home than there are going out in point of bulk, and consequently there is an immense tonnage of shipping set at liberty on arrival in port.

3416. Is not another cause the valuable
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quality of the cargoes which come home, such as wool and gold?—No, not exactly the valuable quality, with the exception of gold.

3417. And the consequence is that those ships go from Australia to seek freight?—Yes, they go to seek freight either to the west coast of America, China, or India.

3418. If they could get a telegraph down at Sydney they would not have to go seeking freight; they would know at once where to get good freight?—Yes, it would be an immense advantage, not only with regard to their seeking for freight, but, in many instances, with regard to their going to purchase cargoes.

3419. Would it not save them an enormous
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R. Brooks,
Esq., M.P.
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R. Brooks,
Esq., M.P.

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sum of money in demurrage if they could know exactly where to go?—It would be an immense saving and an immense facility.

3420. Do you know what the present practice of those ships is, whether they go to Galle or not to catch the first telegrams?—No, that is very much out of their way; many of them go up to China; and going to Galle would lengthen their passage exceedingly.

3421. You are probably aware that Mr. Mackay's ships do go to Galle to get the first telegram?—Yes.

3422. And, therefore, to know where to go to for freight?—Occasionally they go to Galle in seeking freight for India.

3423. They go there in order to know what part of India to go to?—Yes, to know what port in India.

3424. Do you know in how short a time you can get news by telegraph now, from Sydney by way of Galle; is the quickest communication from Sydney to London, by steamer to Galle and from Galle by telegraph?—I have now telegrams from Sydney, dated the 25th of April, and I have had them in my possession five days.

3425. That would give 25 days?—Yes, they would come by steamer to Galle, and by telegraph from Galle to London.

3426. Could you give us any estimate of what a ship would save in demurrage if she could have a telegraph down to Sydney to tell her where to go to for freight, instead of going to some place seeking it, and not knowing where to find it?—I could not tell that exactly in figures, but it would save, perhaps, two or three months, and it would save an immense amount in the event of a ship going to purchase a cargo.

3427. What would be the demurrage per day in the case of a ship of 1,400 tons?—A ship of 800 or 900 tons would cost about 20 l. a-day.

3428. And a ship of 1,400 tons would be so much more?—It would be very little more; it would be only a little more in labour, or wages of crew.

3429. If you could save three months' demurrage, that would be a very large sum, more than 18,000 l. in a year, would it not?—Yes, it would be a considerable sum, but not at the rate of 18,000 l. per annum.

3430. Therefore shipowners would be prepared to pay a very fair sum for immediate telegraphic communication?—There is no doubt about it; they would be very glad to do it.

3431. Mr. Baillie.] Would the captain of a ship trust to telegraphic communication without waiting for a letter?—Certainly he would; they are in the habit of doing it at Calcutta and Madras constantly.

3432. Mr. Marsh.] The communication would, of course, go through the agents, and the agents would use their discretion?—Yes.

3433. Chairman.] If any doubt arose in the mind of the captain it would be open to him, would it not, to telegraph for further instructions from England, or from the place from whence he had received the last information?—Yes.

3434. You are, I believe, very extensively connected with the Australian trade?—Yes; and have been for a great number of years.

3435. The Committee may gather from the evidence which you have given that it would be a very great advantage, not only to shipowners but to every one connected with commerce, if arrangements could be made by which the ships could be kept constantly in employment rather than being sent in ballast to seek freights at various ports in the east?—Very much so indeed. But not only that, it would be a great advantage to commercial men in sending their orders home. By the last telegraph some parties wished me to buy certain things for them, and it is very important to them that I should have their communications, and that the thing should be done off-hand without delay.

3436. For instance, in the case of the shipment of tea from China there is frequently a scarcity of freight, and it would be a great advantage with regard to Chinese commerce, if they could telegraph to the ports in Australia that they were in want of tonnage?—Yes. There is another very important point also with regard to telegraphic communication, you would be enabled to effect your insurances with safety, which you are not now able to do without, perhaps, paying some extraordinary premium for it, because you do not know where your property is going to.

3437. And the charge for insurance forms a very important item, does it not, in the cost of a cargo imported?—Yes, in ship and cargo.

3438. As far as your experience goes, being largely connected with the commerce of Australia, is it your impression that the different Colonies are very desirous of establishing this telegraphic communication with the mother country?—I think so. Besides that I consider that the emolument arising from telegraphs would amount to a very large sum. For instance, the least telegram that you send to Galle you have to pay 5 l. for.

3439. Is the telegraphic communication as at present existing to Rangoon, extensively used by the Australian merchants?—Yes, very much indeed; because they have got communications with Calcutta by way of Galle, and from thence by steam to the Colonies.

3440. Mr. Marsh.] Supposing that from Sydney we paid as much as 15 l. or 20 l. for a telegraphic communication, I presume no one would grudge that in consideration of the great advantages which they would gain?—£. 15 or 20 l. is rather a large sum, and you would look at it before you took it out of your pocket, but in many cases of course you would pay it.

Tuesday, 17th July 1866.

MEMBERS PRESENT :

Sir Charles Bright.
Mr. Childers.
Mr. Crawford.
Sir James Fergusson.
Mr. Ward Hunt.

Mr. Laird.
Sir Henry Rawlinson.
Mr. Schreiber.
Mr. Stansfeld.

ROBERT WYGRAM CRAWFORD, Esq., IN THE CHAIR.

Mr. LEWIS WELLS, called in; and Examined.

3441. *Chairman.*] You are in the employ, are you not, of the Telegraph Construction and Maintenance Company?—Yes.

3442. I believe your company have recently issued a public notice saying that you will receive messages for transmission to Egypt, and from Egypt and Diarbekir, on the main line to India?—We have.

3443. Have you found any difficulty in carrying out that intention?—At first, when we issued the notice, very few messages were sent, but when the direct route was interrupted, or when very great delays took place, we began to have a great many messages, and those messages were sent in very good time; they got through, I believe, to India in about two or three days. Suddenly, without any previous intimation, we had a notice that the Turkish Government, to our officer at Gaza, to refuse those messages, and all the telegrams that have been sent up to that time were stopped; altogether, I believe, something like 14 or 15 messages were detained in that way before we could give notice of this refusal on the part of the Turkish Government to take messages.

3444. Then you do not receive them now?—No; we were compelled to issue a notice to stop them. We informed all the administrations that they could no longer be taken that way.

3445. Have you received any messages from India by that route?—A few, but not many; they came through in about three days.

3446. Did the Turkish authorities assign any reason for declining to take them?—They gave as an excuse that they were not prepared for the service; but they accept messages that emanate in Egypt, that are actually sent from Egypt, although they will not take messages from European stations.

3447. They will receive messages of Egyptian origin or destination?—Yes, of Egyptian origin or of Egyptian destination. The public even in England could get their messages through to India by that way if they had an agent in Alexandria or Cairo who would redirect the messages.

3448. That involves agency, and agency involves, does it not, confidence and expense?—

Quite so. Our own manager would receive messages thus addressed.

3449. Without charge?—Yes, without charge, and send them on. We have addressed a complaint to the Foreign Office, and they have referred the matter to the Ambassador at Constantinople.

3450. Do you apprehend that there will be any difficulty in working that line with satisfaction to the public if it were brought within the terms of the Turkish Convention?—It would always be subject to delays, because we find that, in the case of the messages that have been sent, they have been detained two days sometimes, in consequence of some interruption on the land lines. The land lines in Egypt are always liable to interruption.

3451. Can you describe exactly the course of that line after leaving Gaza?—After leaving Gaza it would go past Aleppo to Diarbekir, and at Diarbekir it joins the direct route on to the mouth of the Persian Gulf, that is, as far as I know. We hand the message over to the Egyptian Government at Cairo, and they take it forward.

3452. *Sir Henry Rawlinson.*] Do you know how many wires there are on that line?—No, we have no information; we do not know the details at all.

3453. *Sir Charles Bright.*] Did the Turkish Government give any reason for declining to take messages from El Alrish?—They said that they were not prepared for the service, although our manager had arranged with the Egyptian manager, Mr. George, to take those messages; but the Turkish authorities of course over-ride the Egyptian, so that they refused to send them.

3454. It is the fact, is it not, that they would not get so large a proportion of the charge?—That is so.

3455. That is to say, they would lose about the equivalent to the charge between Constantinople and Belgrade?—That, I think, is the real reason.

3456. *Sir Henry Rawlinson.*] Still they have only one wire; but on the other line they have three?—I was not aware of that.

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3457. From

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L. Wells.
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3457. From Constantinople to Diarbekir they have three; so that that makes a vast difference as to the capacity of the line?—It would, certainly; but this route is more expensive than the

direct route, the Malta and Alexandria route; it is 17. 12s. dearer, therefore it would only be an alternative line, to be used when the others were not working.

Lieutenant Colonel FREDERIC JOHN GOLDSMID, called in; and Examined.

Lieut. Col.
F. J.
Goldsamid.
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3458. *Chairman.*] WHAT is your official position in connection with the telegraph?—I am now Superintendent of the Indo-European Telegraph; that is the title by which I was gazetted.

3459. How long have you been in England?—Very nearly a month.

3460. When did you leave India?—I left Bombay on the 24th of May.

3461. You came by way of Egypt, I presume?—Yes.

3462. When did you last visit Persia?—I left Teheran, in Persia, about the 4th of December, and I was in Persia about two months after that, travelling through the country.

3463. You proceeded, did you not, by way of Yezd to Choubar, on the Mekran coast?—Yes.

3464. What was the object with which that journey was undertaken?—At the end of 1861, more than four years ago, I left Kurrachee to inspect the line of coast up to Gwador, with the intention of proceeding on to Bunder Abbas, to arrange with the chiefs of the coast about a land line from Kurrachee to Bunder Abbas, under the orders of the Government of Bombay; and when I had arrived about 200 miles west of Kurrachee, at a place called Ormara, I received an intimation from the Government that I was not to go beyond Gwador, as it was possible there might be some political difficulties beyond Gwador, and that I was to return from Gwador to Kurrachee instead of going on to Bunder Abbas; but the idea has never been abandoned of having a land line carried along the coast the whole way to Bunder Abbas from Kurrachee; and, although I came back then, further inquiries were made upon the subject two years afterwards; and in 1863 I was sent by the Bombay Government to make inquiries on the coast, and to ascertain as well as I could what was the real condition of the people and petty chiefs between Gwador and Bunder Abbas. The line from Gwador to Kurrachee had been put up in the meantime, but beyond Gwador we had nothing. I carried out my instructions to the best of my ability, called in at Choubar Gwettur, and some other places, and made several reports to the Government in the Political Department upon the subject of inquiry. I was not then connected with the telegraph; but at the beginning of 1864, when Colonel Stewart had come out to lay the cable in the Persian Gulf, I received instructions from the Bombay Government to go with him up to Bagdad, or anywhere else that he wished; and from Bagdad I received instructions to go on to Constantinople to inspect the Turkish Asiatic line of telegraph. Colonel Stewart had intended to inspect this line himself, but was prevented doing so owing to other duties, and the necessity of his return to Bombay. I afterwards joined Colonel Stewart at Constantinople, and he wished me to come on to London to see the Persian Minister here with reference to some disputed ground at Khánikin. There was a dispute about the Persian line of telegraph, and other matters, which had not then been set up, between the Persians and the Turks.

3465. Do you consider it necessary when the telegraph communication with India is fully developed, or even with reference to the amount of traffic now passing over it, that there should be a second method of communication between Bagdad, for instance, and India so as to be perfectly safe with regard to the dangers which are attendant upon the submarine cable at all times?—I do not think that this is absolutely necessary for the small section between Bagdad and Bushire; but, I think, now that the alternative Persian line has been completed, we have obtained a very good link with the Russian telegraph, which we should not have had under other circumstances, because we have a junction with the Russian lines at Teheran, owing to that alternative Persian line.

3466. Looking to that line down the Persian Gulf, is there not a certain degree of risk attending the reliance upon one line only, and that a submarine line?—Yes; I think so.

3467. If it were considered necessary to double the communication between Fao and Kurrachee, what suggestion would you make to carry out that object?—We have a double communication from Fao to Bushire, also from Kurrachee to Gwador; and I should certainly suggest that a land line be made connecting Gwador with some point of the Teheran to Bushire line, so as to form an alternative from Bushire to Gwador.

3468. Excepting the line from Kurrachee to Gwador, as being an alternative to that extent, would you propose that the line should then be submarine to Bunder Abbas, or that it should follow the coast up to Bunder Abbas?—The coast line, I should think, would be much better.

3469. Are there no physical difficulties in that line?—Not that I am aware of. From all that I have seen, and I have seen a very great part of the coast from Gwador to Bunder Abbas, there is no particular difficulty; certainly none compared with the difficulties between Gwador and Kurrachee.

3470. A considerable part of the coast is held, is it not, under a sort of lease, by the Imaum of Muscat from the Persian Government?—Yes; but that lease is about to expire.

3471. Will it then fall back into the hands of the Persian Government?—That depends upon circumstances. The Persians may lease it again, but there is some difficulty at Muscat; I am not quite sure whether it would be leased to the present Imaum in the same way as it was to his predecessor.

3472. Is the boundary between Persia and Beloochistan accurately defined?—No, not at all; on the usual maps that we have, nothing like it; it is very much to the eastward of what it is now on almost all the maps.

3473. May not some political difficulties be found to be encountered in carrying a line along that coast?—I do not think so; the main object of my journey was to ascertain what political difficulties

ties there would be, and I do not think there are any that could not be overcome by simple negotiation with the Court of Persia, at Teheran.

3474. The Committee may therefore assume it as your opinion that there would be no difficulty in carrying a land line on from Gwadar to Bunder Abbas?—I think there would be no difficulty.

3475. From Bushire would you go along the shore of the Persian Gulf, or would you go northward by the route by which it comes down from Ispahan?—I should go to the north inland, from Bunder Abbas, and join at Ispahan.

3476. That was a part of the route that you and Major Smith took, was it not?—Yes, he and I were together.

3477. But after you parted company, he came down to Bunder Abbas?—After he and I parted company, I went into Beloochistan.

3478. Did he report any physical difficulties on that part of the route?—Yes, he considered that that route was a difficult one, but he was of opinion from all he heard that there was a route a little to the westward of it, which was much better, and he has been written to with reference to a second survey of the bit between Kirman and Bunder Abbas, either by himself or by Lieutenant St. John, who is employed with him, or Lieutenant Pierson, or any available officer.

3479. Should it be possible or desirable to bring the line from Kirman down to Choubar, by way of Bampur?—I think it would be possible, but it is a very difficult country, and there is a great want of water.

3480. Kirman is itself a considerable city, is it not?—Yes, it is.

3481. With a large trade?—With a tolerably large trade; not so much as Yezd, but it is a large town.

3482. The country between Kirman and Yezd is not a difficult country, is it?—No, not at all so; at this present moment a carriage might be driven the whole way from Kirman to Yezd.

3483. Practically, from Ispahan down to Bunder Abbas, there would be no physical difficulty of any consequence to be surmounted?—No, none whatever from Ispahan to Kirman; but from Kirman to Bunder Abbas there is a doubt about which would be the correct route to go; there are two routes, one used in the winter, and one in the summer; we were there in the winter, and took the winter route, but the summer route is considered a better one for the telegraph; that route has not yet been looked into; but I have no doubt that, on minuter inspection, a practicable route would be found.

3484. In addition to serving our own purposes, if we could get a line constructed with the aid of the Persian Government, we should be serving their own purposes of internal communication?—Very much indeed. We should, perhaps, be serving their subjects even better than their government, because there is a very large mercantile community at Yezd, who are very much interested in it; I am afraid that the government would not be so much interested as the Yezd merchants.

3485. Of what classes does the mercantile community of Yezd and also of Kirman consist?—There are a great many Persian merchants, men of respectability and of tolerable wealth, but there are also Parsees to a very large extent.

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3486. Are they what are called Persian Parsees, as contra-distinguished from the Bombay Parsees?—Simply, I believe, from their residing in Persia, not otherwise; I imagine that they would be just the same as the Bombay Parsees; they dress a little differently, but I fancy they are just the same except from the difference of residence, and their falling into the customs around them, and keeping up the customs of the country.

3487. There are a good many Jews, are there not?—There are a good many Jews; I do not know that the Jews are wealthy, but there are a good many there.

3488. In fact, there is a considerable commercial population?—Yes, there is; there are about 1,000 or 1,500 Jews, and about 5,000 Parsees.

3489. Besides gaining the advantages which you have referred to, you would gain this other advantage, that the communication between India and Persia would, by that route, be far better than the communication by way of Bushire and Shiraz?—I think it would be very much better; Colonel Stewart was always of opinion that if we had a line brought on by the coast to Bunder Abbas, we ought to join rather at Shiraz than at Bushire, because the country between Shiraz and Bushire is a difficult country for the telegraph, and it has often failed us, owing to the difficulties in bad weather; it is a very mountainous country.

3490. Is it subject to snow storms?—Yes; and this year the line has failed us a good deal between Ispahan and Shiraz also.

3491. Therefore, on the whole, you think that it would be better to bring the line down by Bunder Abbas and Yezd?—I think it would be better to have an alternative to that section of the Persian line between Ispahan and Bushire.

3492. According to your information, how does the Persian line generally work now; I mean the line from Bagdad to Teheran and down to Ispahan?—From Teheran to Bushire is all that I know of very recently; I had a telegram about 10 days ago from Teheran, saying that, with occasional interruptions, the line was working well from Teheran to Bushire, but I have not heard of the line from Teheran to Kirmanshah lately. We are now working under considerable difficulty, because we have but one wire, and the posts have been requiring a change for some time. These we are gradually procuring from the Persian authorities; but active measures have been, more or less, deferred, owing to the proposed setting up of a second wire in the autumn of this year, agreeably to the terms of our lately ratified convention.

3493. Do you know anything of the line between Teheran and Tabreez?—I have seen it as far as Kasbin, about 80 miles from Teheran, and I have seen the whole line to Reshd, about 200 miles from Teheran, which passes through Kasbin, and is, so far, a part of the Tabreez line. That is not in very good order; it is very seldom, indeed, in good order.

3494. The Committee have had evidence before them, to the effect that one of the chief reasons why the Russian system has worked so badly, has been the imperfect communication between Teheran and Tabreez; is that consistent with your knowledge?—Yes; that is the great reason.

3495. Does that arise from natural circumstances?—I think it arises from the want of proper

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proper supervision of that line; that line is neither in the hands of the English nor of the Russians.

3496. It is an independent Persian line?—It is an independent Persian line, and they put in just whoever they please; it is just what they wanted to do with the whole of our line; they wanted us to go, and to take the whole of the line into their own hands; that is the difficulty that we have had in the last convention with Persia.

3497. Do they want to oust our administration altogether from Persia?—They say that they are fully capable of carrying on the line themselves, and that they would much rather do it themselves; but after being talked to for some time, they gave in and allowed us to keep an establishment of 50 Englishmen in Persia, for the next five years.

3498. Do you not apprehend that if the management of the line went into the hands of the Persian Government, it would, to a great extent, frustrate the object you have in view, in making a good alternative line?—Entirely so at present, but we hope that at the end of five years they will be able to take charge of it, and I think it is very likely they will, as they are sufficiently intelligent to make rapid improvement.

3499. Have you any information to give the Committee with regard to the working of the Persian Gulf Line?—I have an extract from an Indian paper, which I can hand to the Committee.

3500. I mean as to the general working of it beyond what the Committee have already been told?—From what I know of the Persian Gulf Line for the last year, the cable has been working very well without interruption; I am not aware of any interruption for a year; it is about a year, I think, since the last repairs were made in the cable.

3501. As a link in the communication between this country and India, I may gather it to be your opinion that no blame is to be attached to the administration of that part of it which is in English hands between Fao and Kurrachee?—None whatever. Interruption to the cable working, owing to accident, has occurred some five times; but there was no blame whatever to be attached to the administration, quite the contrary.

3502. We have accounts of the results of the working of it, down to the end of December; have you any later information?—I have an extract here from an Indian paper (*handing in the same*) which has been certified as correct, by Mr. Walton, the director of the coast line, and he says that it is his own return.

3503. The figures are Mr. Walton's; is the language his also?—No; I should say that the language is that of a newspaper article, because it says that the statement showing the working of the section has been published, and, therefore, I should say that it is an extract from the statement of Mr. Walton.

[The following Statement was delivered in:]

INDO-EUROPEAN TELEGRAPH.

THE Statement showing the working of the Mekran section of the Indo-European Telegraph (the portion under the control of the British Government) has now been published up to the end of April. From it we learn that the number of messages and the revenue during the latter month were larger than during any one month since the Indo-European Telegraph was opened. The figures for the four months are as follows:—

—	Government Messages.	Total Messages.	Revenue.
			R. A. P.
January - -	20	2,632	32,870 14 -
February - -	44	2,370	75,069 8 -
March - -	57	2,764	87,061 10 -
April - -	32	3,229	1,00,903 - -

The time occupied in the transmission of messages from Great Britain to Kurrachee during the same period was as follows:—

—	Via Turkey.	Via Russia.
	D. H. M.	D. H. M.
JANUARY.		
Longest time - -	20 0 0	26 0 0
Shortest " - -	0 6 43	2 0 0
Average " - -	5 19 10	21 1 50
FEBRUARY.		
Longest time - -	6 21 10	25 21 9
Shortest " - -	0 7 0	11 23 50
Average " - -	2 9 30	18 16 30
MARCH.		
Longest time - -	9 19 30	12 20 0
Shortest " - -	0 2 4	10 20 0
Average " - -	3 17 0	11 15 30
APRIL.		
Longest time - -	7 19 30	15 19 30
Shortest " - -	0 5 1	5 19 30
Average " - -	3 1 20	10 10 30

From this Statement it appears that a great improvement took place in the working over the Turkish lines during April as compared with March, although the time occupied is still in excess of the average during February. This is probably accounted for by the much larger number of messages during April. The Russian lines appear to be steadily improving, but still fall very short of the point which would justify this route being employed. A serious omission in these returns is a statement of the number of messages sent respectively by the Russian and Turkish routes, and which we trust will, if possible, be given for each month of the year when the next return is issued.

The time occupied in the transmission of messages between Kurrachee and Fao was as follows:—

—	Longest Time.	Shortest Time.	Average Time.
	D. H. M.	D. H. M.	D. H. M.
January - -	0 10 30	0 0 9	0 1 4
February - -	0 16 35	0 0 10	0 1 36
March - -	0 10 47	0 0 11	0 1 14

The April returns for this section of the line are not yet published.

3504. It appears from that statement that the whole of the traffic conveyed over the line during the four months in question earned a sum of 34,590 L. 10 s. as the Persian share alone?—Yes.

3505. The addition of those messages is 10,995?—Yes.

3506. And the sum earned is, converting rupees into pounds, 34,590 L. 10 s.?—Yes.

3507. That is at the rate of pretty nearly 105,000 L. per annum?—Yes, that would be correct.

3508. Have you any account of the cost of that line?—I have no correct account; but I could, in communication with Sir Charles Bright, get the whole cost of the cable.

3509. I mean, you have no information as to the amount in which the Persian line stands on the books of the Government?—No, I have no correct

correct information; but I could give the cost of the establishment.

3510. One witness told us that that could only be obtained in Bombay; is that correct?—I should say, in round figures, that the cost of the establishment is about 30,000 *l.* a year; that is to say, the working establishment.

3511. *Sir Charles Bright.*] Does that include the cost of the steamer "Amber Witch"?—I do not see the steamer mentioned in the account; but I have very little doubt, after retrenching what is extra in that establishment, we could bring it easily down to 30,000 *l.* a year.

3512. *Chairman.*] Have you sufficient experience to enable you to say what is the sum which ought to be set aside annually for what we may call the refectations of the line?—I do not think I could say exactly; I have been so much away in other parts, and almost upon other duty, although I have been the superintendent of the telegraph, that I have been out of the way for months of examining its work in detail; but I might easily ascertain it upon looking over the data which I have on the subject, and in communication with others.

3513. Have you any account of the cost of the construction of the Persian lines?—Yes; I think I could tell pretty well, roughly, the cost of their construction, because those are estimates which I made when I was in Persia. The total expense already incurred upon that line in Persia is, in round figures, about 25,000 *l.*; I think that is tolerably near to the amount; the Persians have paid out of that 12,000 *l.*

3514. For which line?—The Persian line, from Khánikin to Bushire.

3515. Does that include the cost of materials here?—I have everything down in that; I have got the materials down at 11,000 *l.*

3516. How many miles is that?—About 1,100 is what we reckoned the whole distance from Khánikin to Bushire; and I have only got down for materials about 11,000 *l.*; then, of course, there is only one wire, and the posts are furnished from the country.

3517. Is that what you call a first-class line of telegraph in point of construction, as to insulation of the wire, and everything of that kind?—Yes. I should say certainly that the insulation is good; indeed, it is only during the last severe winter that it has deteriorated at all.

3518. Are the Persian lines largely used by the Government of Persia?—Very much indeed for local traffic.

3519. And by the people themselves?—Yes, very much by the people themselves; and the younger Mr. Walton, who is employed in the Persian telegraph, tells me that the mere local traffic that they have more than pays their expenses.

3520. Have you any information with regard to the working of the Russian system in connection with the Persian system?—I know that when it was first tried it was quite a failure; the messages took a month in reaching India, but I do not believe the delay was to be attributed so much to the Russians as to the line between the Russian frontier and Teheran. Now the Russians appear to have improved, and I received a telegram from Teheran in three days, not many days ago, by the Russo-Persian route.

3521. It was stated by a Witness to the Committee, that messages have been received at Tabreez in 12 hours from London; does that

strike you as being extraordinarily quick?—No, it is very likely indeed; I think many messages have been received as quickly as that; I could not give instances, but I believe there have been messages received quite as quickly as that by the Russian route.

3522. Before you left India you visited Madras and Calcutta, did you not?—Yes.

3523. What was the state of public opinion there amongst mercantile people, as to the working of the telegraph?—I think they had been very much disappointed; but I think they were well satisfied with the working for the present year; indeed, I am sure they were.

3524. It had improved, then?—It had improved very much.

3525. Have you any knowledge of the wire connecting Kurrachee and Bombay?—Simply that the public complained much of that wire; but I understand from Colonel Robinson that it is now working much better; I do not think he had then had the latest accounts from India, but about a week or 10 days ago he told me that he understood it was working at five minutes.

3526. Are you aware whether any preparation was made by the Indian authorities for the transmission from Kurrachee, and circulation in India, of the messages brought out from England to Kurrachee?—I know that the Viceroy himself had taken a great interest in the matter, and that he had ordered no expense to be spared in improving the line between Kurrachee and Bombay, but I do not know what steps have been taken since then.

3527. I am speaking of the period when the line was first opened by the Persian Gulf in the month of February last year?—I do not know that any special arrangements had then been made; there are no special wires that I am aware of in India for us.

3528. It appears, from what this Committee have heard, that the great cause of dissatisfaction on the part of the mercantile community in India was in consequence of the insufficiency of the arrangements between Kurrachee and Bombay?—Yes; but I know that orders have been given for the improvement of it.

3529. Since the facts became so manifest?—Sir John Lawrence told me himself at Simla, that those instructions had been given, and he asked me particularly whether they had been carried out.

3530. At what time did he make those statements?—It was about April last.

3531. Fourteen months after the line was opened?—I was not in India when the line was opened; I had been away from India for 12 months then.

3532. *Sir Charles Bright.*] The sum which you named of 25,000 *l.* for the Persian line was for the wires and the insulators and the supervision only; you do not include posts or labour, do you?—The posts and the labour are furnished by the Persian Government, and labour is very cheap in Persia.

3533. That sum only includes the stores sent out from this country, and the supervision of our officers?—I have been looking over the figures this morning, and I do not think I am mistaken in them. That 11,000 *l.* does appear a small sum.

3534. The 11,000 *l.* would about pay for the wire and insulators?—The account is exactly as

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made out with Major Smith, and written by me at Teheran: 25,000 tomans is, moreover, Major Champain's own estimate of the Persian expenditure; we have spent in addition about 5,000 tomans, and the cost of the original material was about 22,000 tomans. I got those estimates upon the very best authority, from the officers who set up the line.

3535. Sir Henry Rawlinson.] With regard to the line between Ispahan and Shiraz, I believe that that is the portion of the Persian line which has failed during the last winter?—Yes; the last winter it has failed.

3536. Can you tell me whether the line follows what is called the summer route or the winter route; that is to say, does it go by Abadeh or over the high plains by Aspas?—Not by Aspas.

3537. You are aware that there is a physical distinction between the lines; the direct or summer line, is notoriously over very high, exposed ground, and will always be subject to snow storms, and, in fact, is impassable in winter?—Yes; but I do not think the wire follows that route.

3538. There is a winter line from Yezdikhast to Persepolis, which makes a slight detour, but is always free from snow?—Yes.

3539. It seems to me then that if the telegraph followed that winter line, though there might be a detour of some 20 miles, yet the wire would never be subject to the same accidents from the climate as on the direct summer line?—Yes, that is so; I am not quite sure which line the wire follows. I think it passes through or near Yezdikhast; but, if you will allow me, I will read two or three lines of a letter from Lieutenant St. John, about that very line. "The roads between Kermanshah and Hamadan and Shiraz and Abadeh are said to be completely impassable, and it is only by making long detours that the couriers can get along. After a long interruption we have at last got the line to Bagdad open, but the Shiraz line seems hopeless. Serjeant Greig went out from Abadeh, and with great difficulty succeeded in reaching Dehbid, but from there could get neither backwards nor forwards. The villagers refused to take 5 krauns a-day to work in the snow, and Greig with great difficulty got back by Abadeh by a circuitous road."

3540. That evidently refers to the high summer line?—I think it is the high line through Abadeh.

3541. It would seem to be a line which is much exposed to winter storms?—Yes.

3542. Whereas there is a sheltered road further to the east which avoids all the high land, and which is followed in winter by the caravans, and if the telegraph wire ran by that line it would seem that all the great difficulties would be avoided?—Yes. But I cannot speak positively of this part of the country, never having been there; I proceeded eastward from Ispahan.

3543. With regard to this new proposal of an alternative land line; in the first place, would you recommend that the line should come from Kirman to Bunder Abbas or to Choubar or to Gwadr; that is, should it go direct to either of the latter points or should it touch the coast at Bunder Abbas and then follow along the shore to Choubar and Gwadr?—I think that it should touch the coast at or near Bunder Abbas and pass along the coast. I went to Beloochistan

partly with the intention of seeing how it could be carried through the upper part, but I think it would be difficult, though not impossible.

3544. You travelled, did you not, by both routes; that is to say, from Kirman to Bunder Abbas, and from Kirman, by Bampur, to Choubar?—No; Major Smith was with me. We parted at Sabristan. We marched together to Sabristan, and then he went down to Bunder Abbas, and I went on to Bampur.

3545. Do you think that there would be very great difficulty in carrying a line by Bampur from Kirman to Choubar?—I really do not think it is at all impracticable, but it would be a great deal more difficult than the other route. A coast line is much more easily got at. Boats might frequently come in and bring stores.

3546. Are you aware how the Persian Government regards the formation of an alternative line from Ispahan to Bunder Abbas?—I do not think they would have any objection to it, but at present they are not inclined to entertain it. The Minister for Foreign Affairs told me that the King was not inclined to entertain it; he thought it was quite enough having got through one convention for the present, and there was no occasion to be beginning immediately upon another. At the same time, they made no difficulty whatever to my going into any part of Beloochistan. The Persians gave me every possible assistance, although they knew well what I was going to look at.

3547. Is there any disturbance or unpleasant feeling between the frontier authorities about Bampur?—No; in Bampur the Persians seem to have a very firm hold indeed; it appears to be as much their own country as any part of Persia. The change is on the sea side of the Mekran Hills.

3548. Did you meet with any difficulty in coming through Mekran from Bampur to the sea coast?—None whatever; I was simply with one old Persian guide, and two or three of his followers; he had two or three followers with him, but nothing like an escort. I experienced no difficulty whatever.

3549. Do the chiefs in that part of the country acknowledge the supremacy of the Khan of Kelat?—Not of the Khan of Kelat; of the Persians.

3550. Do all the Belooch chiefs between the so-called Persian frontier and Choubar acknowledge the supremacy of Persia?—Yes.

3551. Then why should not the Persian frontier be brought down there to the sea coast?—That is what I think it will be; that idea appears to be really entertained by the Persians. The only difficulty I see with regard to its being entirely Persian is, that there are places called Kassarkand and Geh, where they are a little inclined to rebel against the Persian authority. Geh is probably marked on the map you have there. I daresay Kassarkand is not. It would be about there (*pointing to the map*), and just round there the people are inclined to rebel against the Persian authority. That was the reason why I could not go that way. The Persians would not allow me to go down there.

3552. Do you know anyone who has travelled direct from Bampur to Gwuttur?—Not since the days of Grant; he came up from Gwuttur to Bampur through Geh.

3553. He did not go to Bampur, did he?—
Yes;

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Yes; I believe on two occasions; certainly on one occasion, because one of the routes by which he went to Bampur was this: he landed at Swuttur and came up to Bampur in this way *(tracing it upon the map)*; he came along the coast here.

3554. I should like to ask a few questions also upon the portion of the line between Teheran and the Russian frontier. In the first place, is the line of one wire or two wires from Teheran to Julfa?—I think it is a single wire; I am almost sure it is one wire down to Tabriz and to Julfa too.

3555. We have had it stated in evidence that there was some convention, or some intention to make a convention, between the Persian and the Russian Governments with regard to the better security of that portion of the line; have you any information upon that point?—I have seen the convention between the Persians and the Russians. I am not aware that there is anything in the convention beyond the ordinary rules for exchange of telegraphic messages, just the same as in the convention of Paris or any other convention. It is confined almost entirely to that; it is a very large, bulky document; but there is nothing in it with regard to setting up new wires or improving the line; it is almost a copy of the Convention of Brussels or the Convention of Paris.

3556. So that, at the present time, there is no sort of right of supervision on the part of any European power over that portion of the line?—No, none whatever; I have often spoken to the Russian Minister about that line; he seemed to wish that we would take charge of it; at least, he did not seem to offer any objection to our doing so.

3557. Would it be, in your opinion, possible to bring that portion of the line within the operation of our English Convention, because, if so, that would remedy the whole difficulty of the present situation?—I think it would; but I think it would be almost easier, if it were not objectionable in a political point of view, to let the Russians have it; it would give them no particular footing there, they would have perhaps two clerks at Tabriz; I think they would then be more inclined to pull with us in all telegraphic questions; they would only require about half-a-dozen *employés* altogether, between Julfa and Teheran.

3558. Has there been any question of a submarine cable across the Caspian from Resht to Baku or Astrachan?—I believe there has; I do not know the particulars of it; I do not know who the promoters were, but I heard the plan mentioned.

3559. Are you aware whether there is at present an extension of the telegraph down the Volga to Astrachan?—Yes, I saw a line of telegraph myself at Astrachan; I think it goes down the coast of the Caspian, or very nearly down the coast of the Caspian to Baku; it may run inland in the Caucasus; we lost sight of it on moving down the western shores; I understood that there was a communication very nearly down the coast.

3560. With regard to the lower portion of the line, you said that Colonel Stewart was in favour, if there was any wire from Bunder Abbas, of its junction at Shiraz?—Yes.

3561. With the view of avoiding the passes?—Yes.

3562. But that line crosses the passes just as much as the other one?—Yes, but Colonel Stewart thought it better to have two routes; he knew very little of the route between Shiraz and

Bunder Abbas; his idea was simply that, if you had an alternative wire, from Bunder Abbas, it was better that it should join at Shiraz, so as to give an alternative to the difficult line between Shiraz and Bushire. Mahmoud Khan, who was formerly the Minister here from the Persian Court, told me the other day, at Teheran, that he thought there would be no difficulty in getting the Persian Government to take one of the two wires from Shiraz over to Bunder Abbas, or over to Kirman (I think he mentioned Bunder Abbas particularly) if we wished it; that is, instead of having the two to Bushire, to take one across; but that would not quite meet our object; we should like to have another one altogether.

3563. Are you aware of the present position of Bunder Abbas; is it still held by the Imaum, notwithstanding the revolution in Muscat?—The last I heard on leaving India was, that it was still held by the Imaum, but the Persian flag was hoisted there; Major Smith saw the Persian flag when he was there before the disturbances had taken place in Muscat.

3564. I believe the Muscat frontier, if we may so call it, does not extend above 20 miles from Bunder Abbas inland?—Probably not; I believe it is quite a coast possession. I think Major Smith has marked in his map the supposed frontier; I think this is it (*pointing to the map*); there was a talk of a whole coast line from Bunder Abbas to Bushire formerly; one great reason for preferring the upper line was that there was no town whatever of any importance that would come into that coast line; it would be merely an alternative to our cable, whereas the other way we should get in Kirman and Yezd; it would be a great political advantage, independently of the telegraph itself, to get in towns of that description.

3565. There are a great many small places on the route, like Tauree, Congoorn, and Lingar?—Yes; it would be more or less an advantage with respect to them, but we know but little of Eastern Persia; I really think the people there are very well disposed to us; they seem much better disposed to us than the people on the west of Persia; they have more communication with India; I met a good many people who had been to India.

3566. Has the feasibility, or the advantage, of a line direct across from Teheran, by Méshed, to the Punjaub, ever occurred to you?—Yes, by one of the passes about Dera Gaze Khan; I mentioned that in a report to the Bombay Government a short time ago; I said, rather than abandon that altogether, I should strongly recommend that a line be taken into consideration from the Dêrajât to Kandahar, and from Kandahar to Herat.

3567. You think that the Persian Government would be glad to facilitate a line to Herat?—I think the idea of our having a treaty with the Affghans would make them wish us to adopt a line; for rather than that we should treat with the Affghans about a line, they would prefer that we should have the Beluchistan coast line; the whole time that I was at Teheran the jealousy of the Persians was more with regard to the Affghans than with regard to Russia or any other power; they appeared to be very jealous of the Affghans and of our having anything to do with them; it struck me that if we made a proposal for a line through Affghanistan, it would rather incline them to do anything to keep

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keep us from carrying it out. Such, at least, appears to me to be the present feeling at Teheran.

3568. About the Beloochees, how far does the power or the influence of Khilat extend along the coast?—There is a place called Jalk (it would not be marked on that map), on the high road to Seistan; it is almost to the north of Gwader. If a line were drawn thence to the sea, following the river called Dust Khor, which falls into the Bay of Gwuttur, I think that would define the boundary between Kelât and Persia.

3569. That is coming down on the sea coast to Gwuttur?—Into the Bay of Gwuttur, a little to the eastward of the village of Gwuttur.

3570. Gwuttur is about half-way between Gwader and Choubar, is it not?—Yes, about half way; rather nearer to Gwader if anything. Since I came home I have discovered a map on which the Persian frontier is very nearly accurately defined; it is quite a recent map, published at Stanford's. I was not previously aware it had ever been done.

3571. *Chairman.*] Have you any information to volunteer to the Committee?—No, unless it is with reference to what I heard mentioned just now, about the Malta and Alexandria cable, and the communication with Diarbekir and the Turkish lines. Major Champain has been referred to on that very point at Constantinople. The Director General of the Turkish telegraphs begged him to interfere in the question. He says he should like the public to be aware that the Turks have no means whatever of forwarding our Indian messages by that line. I imagine that the objection would be the single wire, and it really is a valid objection; they are not prepared with clerks and so on to forward the Indo-European messages; they are afraid (and I believe

that Major Champain is of the same opinion) that they would get the line into great disrepute by attempting it at present; it might be done eventually.

3572. Sir *Henry Rawlinson.*] That line is susceptible of great improvement, is not it?—Yes; and I see no reason why it should not be improved.

3573. *Chairman.*] You see no reason why it should not be brought within the Turkish Convention, do you?—Not the least. I think the Turkish Convention might be altered to advantage. For instance, if another convention were made in substitution for that, it would be very desirable to provide for the European side of Constantinople as well as the Asiatic side. That convention only applies to the Asiatic side, and if we could combine the two together, and have one convention with Turkey for all their lines, I think it would be very useful.

3574. Sir *Henry Rawlinson.*] Extending as far as Belgrade?—Yes; extending as far as Belgrade on one side and Valona on the other.

3575. There is a submarine communication between Alexandria and Constantinople, is there not?—I do not think there is a direct cable; there is a cable across the Adriatic to Italy, to Valona.

3576. Are there no means, then, of getting to Constantinople from Alexandria?—If they would take Indian messages by the Syrian line, then Alexandria might communicate with Constantinople via Diarbekir.

3577. But supposing the line from Alexandria to Diarbekir to be stopped, owing to want of capacity, would there be no means of reaching Constantinople across the Mediterranean so that Indian messages might then be launched on the Asia Minor line for Fao?—I think not.

EDMUND PEARSON ABERCROMBIE THOMPSON, Esq., Assistant in the Public Works Department, at the India Office, called in; and Examined.

E. P. A.
Thompson,
Esq.

3578. *Chairman.*] HAVE you any information that you can give to the Committee, as to the interference with the common course of telegraphic messages over the Continent by the war?—Yes, in consequence of the receipt, by the Secretary of State for India, of a memorandum by Count Bismarck, letters were addressed to the different telegraph companies, suggesting that, during the present war, telegrams should not be labelled to be sent by any particular route.

3579. Have you received an intimation to that effect through the Foreign Office?—Yes, the memorandum, by Count Bismarck, was received through the Foreign Office.

3580. Have you made any communications yourself to any of your official authorities upon the subject?—No, the Secretary of State has merely addressed the telegraph companies.

3581. Which telegraph companies?—The Electric and International, and the Submarine Companies.

3582. What is the substance of the communication you have made to them?—The substance of the communication made to them is that, as long as the present war lasts between Prussia and Austria, the Prussian administration will hardly be able to continue to meet the wishes of senders of telegrams, as regards the use of the line by Belgrade and Turkey, and that Count Bismarck has accordingly suggested that it

would be advisable that senders should not label telegrams sent through Prussia to India to go by any particular route, in order to leave it open to the Prussian authorities to send them by the route they may think best.

3583. Sir *James Fergusson.*] Endeavours are being made to render available to the public alternative routes not open to those objections, are they not?—Yes, that is the case with regard to the route by way of St. Petersburg to Teheran one section of which is in an inefficient state; the other sections are in very good working order.

3584. There are other routes, I think, mentioned in the papers you have there?—No; they are different sections of the same route.

3585. Sir *Henry Rawlinson.*] Do you not avail yourselves, or recommend the companies to avail themselves, of the direct line to Alexandria?—No; in consequence of objections entertained by the Turkish authorities that route has not been recommended.

3586. So that, in point of fact, the Russian line is the sole line open to India at present?—That is so practically, I believe.

3587. And if there was any misunderstanding with Russia, we should be cut off from all telegraphic communication with India?—We could not rely upon messages being sent by other routes.

3588. Sir *James Fergusson.*] Can you state the condition of the communication via St. Petersburg

burgh and the Persian line, and what steps have been taken towards opening it to the public and putting it in an efficient state?—It is believed that the line from St. Petersburg to the Russian frontier is in a perfectly efficient state; that the line from Teheran on to Bushire is also efficient, but that the intervening section is not efficient; and, in consequence of the receipt by the Secretary of State for India of a representation on the subject, a letter, dated the 13th of July, was written to the Foreign Office.

3589. Will you state the substance of that despatch?—It is to the effect, that although this particular section is not under English management, Her Majesty's Minister at Teheran would probably have no difficulty in persuading the Persian authorities to avail themselves of English agency in putting it into a proper state. It goes

on to say that, it is believed that nothing more would be necessary for the purpose than that Major Smith, the officer in charge of the line beyond Teheran, should depute two or three of his *employés* to undertake the duty. Lord Cranborne, therefore, suggested that a telegraphic message should be sent to Mr. Allison, instructing him to recommend the Persian Government to accept the assistance which Major Smith may offer for the improvement of the line between Julfa and Teheran; and that a telegram, worded somewhat as follows, might probably suffice: "Telegraphic lines reported efficient through Russia as far as Julfa. Induce Persian Government to accept from Major Smith services of his *employés* to set in order the line from Julfa to Teheran." That telegram we have been advised has been sent.

E. P. A.
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CHARLES WELLINGTON HOWELL, Esq., called in; and further Examined.

3590. *Chairman.*] HAVE you a copy of the contract under which the Peninsular and Oriental Company are carrying out the Australian service at the present time?—I have.

3591. Will you hand it in?—Yes. (*The same is handed in.—Vide Appendix.*)

3592. Does not that contract state that you are to perform the service, not at so many miles per hour, but between certain places in a certain time?—Yes, in a certain number of hours.

3593. Can you tell the Committee from that contract, in how many days you are to perform the service between Point de Galle and Sydney?—It is a different time outwards and homewards. The passage in the contract relating to it is this:

"It is hereby agreed that if the company shall fail to deliver the said mails at Sydney, from Point de Galle, in 516 hours," then they are to forfeit a certain sum, and so on.

C. W.
Howell, Esq.
—

3594. And homewards, from Sydney to Point de Galle, what is the time?—Five hundred and sixty-four hours.

3595. That contract is still running, and no notice of termination of it has been given?—No; the contract only came into operation in February last. The old contract terminated in February last. This contract is dated the 17th of September 1865, but it only came into operation last February.

Friday, 20th July 1866.

MEMBERS PRESENT :

Mr. Crawford. Sir Charles Bright. Mr. Childers. Mr. Hunt. Mr. Laird. Mr. Marsh.		Mr. Moffatt. Sir Henry Rawlinson. Mr. Schreiber. Mr. Stansfeld. Mr. Weguelin.
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ROBERT WYGRAM CRAWFORD, Esq., IN THE CHAIR.

Mr. FREDERICK HILL, called in ; and further Examined.

Mr. F. Hill. 3596. Mr. Childers.] Do you hand in, on the part of the Post Office, some further correspondence with the India Office?—Yes. (*The same was handed in.—Vide Appendix.*)

20 July 1866. 3597. Do you put in also a comparison of the time under the old contracts, and that under the agreement of last February?—Yes. (*The same was handed in.*)

TIME ALLOWED.

	Under Old Contract.	Under New Contract.
	<i>Hours.</i>	<i>Hours.</i>
Between Southampton and Alexandria - -	310	310
Between Marseilles and Alexandria - -	155	155
From Suez to Calcutta - - - -	501	499
From Sandheads to Suez - - - -	490	488
Between Suez and Bombay - - - -	312	312
Between Bombay and Hong Kong - - -	415	413

3598. Is the time under the new agreement in any case greater than under the old one?—No ; but in one or two it is slightly less.

Mr. EDMUND BOURDILLON, called in ; and further Examined.

Mr. E. 3599. Mr. Childers.] You are here to put in a paper on the part of the India Office, are you
Bourdillon. not?—Yes. (*The same was handed in.—Vide Appendix.*)

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— No. 1. —

PRESENT COST of the INDIA and CHINA PACKET SERVICES, with the Amount of Sea Postage accruing therefrom, and the Amount of Loss.

THE total annual sum now paid to the Peninsular and Oriental Steam Navigation Company for the conveyance of mails between this country and India and China (including the conveyance of the Australian mails between this country and Point de Galle), is 230,125 *l*. Of this sum the Imperial Government and the Australian Colonies and New Zealand contribute 30,116 *l*. as the cost of the packets between this country and Point de Galle, on account of Australian mails, leaving the net payment to the Peninsular and Oriental Steam Navigation Company for the India and China packet services, 200,009 *l*.; to which must be added 20,165 *l*., the expenses of the agencies at Alexandria and Suez, the cost of transit

App. No. 1.

transit through Egypt, and various other incidental expenses; the expense of special packets and pay of naval agents in charge of mails, making altogether the total cost of the India and China mail packets, 220,174 *l*.

In estimating what proportion of this sum of 220,174 *l*. represents the cost of the conveyance of the India and China mails respectively, I have divided the amount paid for packet service into four parts, representing—

1. The cost of the service between this country and Point de Galle (which service is performed on account both of the India mails to Calcutta and of the China mails).
2. The cost of the service between Point de Galle and Calcutta, which is performed on behalf of India only.
3. The cost of the service between Bombay and Shanghai, *via* Galle, which is performed on behalf of the China mails only.
4. The cost of the service between this country and Bombay, which is performed on account of Indian mails only.

The cost of the service between this country and Point de Galle, after deducting the Australian contribution, I have divided between China and India, charging the former in proportion to the number of international letters conveyed to and from China, as compared to the total number of international letters (*minus* Australian letters) conveyed by the Calcutta and China line of packets.

The cost of the services between Point de Galle and Calcutta, and between this country and Bombay, I have charged as wholly for Indian services.

The cost of the packets between Bombay and Shanghai I have taken as wholly for China services.

The miscellaneous expenses I have taken as half belonging to the Bombay line of packets, and therefore on account of India only, the other half on account of the Calcutta line, and therefore divisible between India and China in proportion to the number of international letters carried for each by that line of packets.

The pay of the naval officers I have divided on the same principle as that which I have adopted with regard to the subsidy, *viz.*, the three officers on the Bombay line I have charged wholly to India, the five on the China line wholly to China, and the five on the Suez and Calcutta line I have divided between India and China in proportion to the international letters conveyed for each by that line.

Taking the above as the basis of calculation, I estimate that the whole cost of the Indian portion of the Mail Packet Service is 153,580 *l*. per annum, and that of the China portion of the Mail Packet Service is 66,594 *l*. per annum.

The sea postage derived from the India and China line of packets is estimated at 137,700 *l*. per annum, of which about 105,700 *l*. is derived from the Indian portion, and about 32,000 *l*. from the China and Japan portion of the service.

Thus it appears that the present loss on the India service is about 48,000 *l*. per annum, and that the loss on the China service is about 34,000 *l*., making a total loss of rather more than 82,000 *l*.

General Post Office,
19 March 1866.

(signed) Geo. Chetwynd,
Receiver and Accountant General.

— No. 2. —

APPENDIX (C.) to the REPORT to the Lords Commissioners of Her Majesty's Treasury by the COMMITTEE ON CONTRACT PACKETS; presented to both Houses of Parliament by Command of Her Majesty, 1853.

ABSTRACT STATEMENT showing the ANNUAL COST and EARNINGS of each Line of PACKETS.

Number on Abstract Sheet of Contracts.	Line of Communication.	Annual Subsidy under Contract.	Estimate of Annual Gross Postage.	Estimated Deductions from Gross Postage on Account of Services not rendered by Packets.				Estimated Amount of Earnings of Packets carried to the Credit of the Post Office.	Difference between Subsidy and Estimated Earnings of Packets.
				Repayable to Foreign Countries and Transit Postage.	British and Foreign Inland Rate.	Foreign Inland Rate.	Total Deductions from Gross Postage.		
6	Alexandria, Calcutta, Hong Kong, and Sydney.	£. 199,600*	£. 188,466	£. 16,207	£. 19,695	£. —	£. 35,902	£. 152,564*	£. 47,036

[* In order to make this estimate applicable to India and China alone, the sum of 17,475 *l.* must be deducted from the annual subsidy as the estimated cost of the service between Singapore and Sydney; and from the amount of earnings, 27,030 *l.*, the postage of letters to and from Australia must be taken. Again, in order to facilitate a comparison between the amount of earnings in 1852 (the year to which the above estimate relates) and those in 1865, it is necessary to deduct from the earnings in 1852, 5,686 *l.*, the sum lost on "returned letters." Lastly, it must be borne in mind that the earnings in 1852 were on a higher scale of postage than in 1865, the sea rate in 1852 having been about 10*d.* per single letter, whilst this rate on letters to and from the East Indies is now only 4*d.*—March 1866.]

— No. 3. —

RETURN showing the Actual Days of Departure and Arrival of the MAIL PACKETS of the the Indian Mails during

OUTWARD ROUTE.

Southampton to Alexandria.		Marseilles to Alexandria.		Suez to Bombay.			Suez to Calcutta.		
Left Southampton.	Arrived at Alexandria.	Left Marseilles.	Arrived at Alexandria.	Left Suez.	Stop at Aden. Hours.	Arrived at Bombay.	Left Suez.	Stop at Aden. Hours.	Arrived at Calcutta.
4 January - 12 "	17 January - 27 "	13 January - 20 "	19 January - 26 "	29 January -	12	14 February -	20 January - 24		12 February -
20 "	3 February -	28 "	3 February -				5 February - 7		27 February -
27 "	10 "	5 February - 11	11 "	13 February -	11	1 March -	20 February - 13		14 March -
4 February - 12 "	17 "	12 "	18 "	1 March -	11	16 March -	6 March - 14		1 April -
20 "	26 "	20 "	27 "	14 March -	10	28 March -	22 March - 13		12 April -
27 "	4 March -	28 "	5 March - 11	29 March -	9	12 April -	5 April - 14		28 April -
27 "	11 "	5 March - 12	19 "				The Mail Packet "Canada" broken down and put back to Aden. Mails taken on to Calcutta by French Packet.		
4 March - 12 "	20 "	12 "	26 "						
20 "	25 "	20 "	26 "				20 April -		26 May -
27 "	31 "	29 "	4 April -						
27 "	9 April -	6 April - 12	12 "	14 April -	9	26 April -			
4 April -	18 "	13 "	19 "						
12 "	25 "	20 "	26 "	28 April -	13	12 May -	5 May - 16		29 May -
20 "	2 May -	28 "	4 May -	12 May -	8	25 May -	19 May - 12		10 June -
27 "	9 "	5 May - 11	11 "	28 May -	9	10 June -	6 June - 12		29 June -
4 May -	17 "	12 "	18 "	12 June -	10	24 June -	20 June - 18		12 July -
12 "	23 "	20 "	27 "	27 June -	7	9 July -	6 July - 10		29 July -
20 "	4 June -	28 "	3 June -	13 July -	13	26 July -	20 July - 18		8 August -
27 "	8 "	5 June - 11	11 "	27 July -	6	8 July -	5 August - 8		25 August -
4 June -	17 "	12 "	18 "	12 August -	8	24 August -	19 August - 8		9 September -
12 "	24 "	20 "	26 "	27 August -	7	10 September -	4 September - 13		27 September -
20 "	2 August -	28 "	3 August -	12 September -	8	26 September -	21 September - 7		18 October -
27 "	9 "	5 August - 11	11 "	28 September -	8	12 October -	7 October - 9		28 October -
4 August -	17 "	12 "	18 "	13 October -	13	30 October -	19 October - 14		12 November -
12 "	24 "	20 "	26 "	27 October -	7	9 November -	5 November - 10		29 November -
20 "	2 September -	28 "	3 September -	12 November -	9	29 November -	19 November - 12		13 December -
27 "	8 "	5 September - 11	11 "	29 November -	9	12 December -			
4 September -	17 "	12 "	19 "						
12 "	26 "	21 "	27 "						
20 "	3 October -	28 "	4 October -						
27 "	11 "	5 October - 11	11 "						
4 October -	17 "	12 "	18 "						
12 "	25 "	20 "	26 "						
20 "	3 November -	28 "	3 November -						
27 "	11 "	5 November - 11	11 "						
4 November -	17 "	12 "	18 "						
12 "	27 "	20 "	26 "						
20 "	3 December -	28 "	4 December -				6 December - 13		1865. 5 January -
27 "	10 "	5 December - 11	11 "	12 December -	8	26 December -			
4 December -	18 "	12 "	19 "				20 December - 23		11 January -
12 "	25 "	21 "	27 "	28 December -	13	15 January -			
20 "	1865. 2 January -	28 "	1865. 3 January -				1865. 5 January -	10	28 January -
27 "	9 "	1865. 5 January -	11 "	1865. 12 January -	12	29 January -			
1865. 4 January -	17 "	12 "	19 "				20 January - 10		12 February -
12 "	27 "	20 "	26 "	29 January -	10	11 February -			
20 "	2 February -	28 "	3 February -				7 February - 13		3 March -
27 "	12 "	5 February - 12	12 "	15 February -	7	1 March -			

No. 3. —

PENINSULAR and ORIENTAL STEAM NAVIGATION COMPANY employed in the Conveyance of
the Years 1864 and 1865.

HOMeward ROUTE.

Calcutta to Suez.			Bombay to Suez.			Alexandria to Marseilles.		Alexandria to Southampton.	
Left Calcutta (Sandheads).	Stop at Aden.	Arrived at Suez.	Left Bombay.	Stop at Aden.	Arrived at Suez.	Left Alexandria.	Arrived at Marseilles.	Left Alexandria.	Arrived at Southampton.
1863.	Hours.			Hours.					
24 December -	23	15 January -	-	-	-	19 January -	25 January -	18 January -	30 January.
-	-	-	14 January -	12	28 January -	29 " -	4 February -	29 " -	11 February.
1864.									
11 January -	9	1 February -	-	-	-	4 February -	10 " -	4 February -	17 "
-	-	-	29 January -	15	11 February -	12 " -	18 " -	12 " -	25 "
24 January -	24	15 February -	-	-	-	19 " -	25 " -	19 " -	2 March.
-	-	-	14 February -	14	28 February -	29 " -	6 March -	21 " -	14 "
11 February -	8	3 March -	-	-	-	5 March -	11 " -	5 March -	17 "
-	-	-	29 February -	12	13 March -	14 " -	20 " -	14 " -	27 "
24 February -	27	17 March -	-	-	-	20 " -	26 " -	21 " -	3 April.
-	-	-	14 March -	34	28 March -	30 " -	5 April -	30 " -	12 "
11 March -	13	3 April -	-	-	-	4 April -	11 " -	4 April -	16 "
-	-	-	29 March -	9	10 April -	13 " -	19 " -	11 " -	23 "
24 March -	22	16 April -	-	-	-	20 " -	26 " -	19 " -	2 May.
-	-	-	14 April -	9	27 April -	29 " -	5 May -	29 " -	11 "
10 April -	11	3 May -	-	-	-	5 May -	11 " -	5 May -	16 "
-	-	-	29 April -	13	14 May -	15 " -	21 " -	15 " -	27 "
24 April -	8	19 May -	-	-	-	20 " -	26 " -	20 " -	1 June.
-	-	-	14 May -	10	26 May -	28 " -	3 June -	28 " -	10 "
10 May -	24	3 June -	-	-	-	4 June -	11 " -	5 June -	23 "
-	-	-	24 May -	9	8 June -	9 " -	16 " -	11 " -	23 "
24 May -	24	21 June -	-	-	-	23 " -	29 " -	23 " -	6 July.
-	-	-	9 June -	43	30 June -	1 July -	7 July -	1 July -	14 "
10 June -	8	4 July -	-	-	-	6 " -	12 " -	6 " -	18 "
-	-	-	24 June -	8	13 July -	14 " -	20 " -	14 " -	27 "
24 June -	10	23 July -	-	-	-	25 " -	31 " -	25 " -	6 August.
-	-	-	9 July -	13	26 July -	27 " -	2 August -	27 " -	8 "
10 July -	7	4 August -	-	-	-	6 August -	12 " -	6 August -	19 "
-	-	-	24 July -	9	11 August -	12 " -	18 " -	12 " -	26 "
24 July -	6	18 August -	-	-	-	20 " -	27 " -	20 " -	1 September.
-	-	-	9 August -	14	28 August -	29 " -	4 September -	29 " -	11 "
10 August -	12	6 September -	-	-	-	7 September -	13 " -	7 September -	20 "
-	-	-	24 August -	9	9 September -	10 " -	16 " -	11 " -	24 "
24 August -	15	16 September -	-	-	-	19 " -	26 " -	18 " -	30 "
-	-	-	9 September -	72	2 October -	3 October -	9 October -	3 October -	15 October.
9 September -	11	7 October -	-	-	-	9 " -	15 " -	9 " -	20 "
-	-	-	29 September -	7	11 October -	12 " -	18 " -	13 " -	26 "
23 September -	8	14 October -	-	-	-	18 " -	24 " -	19 " -	3 November.
-	-	-	14 October -	17	30 October -	31 " -	6 November -	31 " -	14 "
17 October -	8	7 November -	-	-	-	8 November -	14 " -	8 November -	20 "
-	-	-	29 October -	9	9 November -	12 " -	18 " -	12 " -	25 "
24 October -	8	17 November -	-	-	-	19 " -	25 " -	19 " -	2 December.
-	-	-	14 November -	9	26 November -	28 " -	5 December -	27 " -	10 "
10 November -	11	30 November -	-	-	-	5 December -	11 " -	4 December -	21 "
-	-	-	29 November -	43	16 December -	17 " -	23 " -	17 " -	30 "
24 November -	16	16 December -	-	-	-	19 " -	26 " -	19 " -	2 January.
-	-	-	14 December -	9	27 December -	29 " -	4 January -	29 " -	11 "
10 December -	12	31 December -	-	-	-	3 January -	10 " -	4 January -	18 "
-	-	-	29 December -	9	10 January -	12 " -	19 " -	12 " -	27 "
24 December -	12	14 January -	-	-	-	18 " -	24 " -	19 " -	1 February.
-	-	-	14 January -	12	27 January -	29 " -	6 February -	29 " -	14 "
1865.									
10 January -	13	30 January -	-	-	-	5 February -	14 " -	6 February -	21 "
-	-	-	29 January -	8	12 February -	14 " -	21 " -	14 " -	1 March.

No. 3.—RETURN showing the Actual Days of Departure and Arrival of the Mail Packets of the Peninsular

OUTWARD ROUTE.

Southampton to Alexandria.		Marseilles to Alexandria.		Suez to Bombay.			Suez to Calcutta.		
Left Southampton.	Arrived at Alexandria.	Left Marseilles.	Arrived at Alexandria.	Left Suez.	Stop at Aden.	Arrived at Bombay.	Left Suez.	Stop at Aden.	Arrived at Calcutta.
					Hours.			Hours.	
4 February -	17 February -	12 February -	19 February -	-	-	-	21 February -	10	14 March
12 " -	26 " -	20 " -	26 " -	28 February -	6	14 March -	-	-	-
20 " -	5 March -	1 March -	7 March -	-	-	-	5 March -	10	31 March
27 " -	12 " -	5 " -	11 " -	14 March -	9	28 March -	-	-	-
4 March -	17 " -	12 " -	19 " -	-	-	-	29 March -	11	10 April
12 " -	26 " -	20 " -	26 " -	28 March -	8	12 April -	-	-	-
20 " -	2 April -	29 " -	5 April -	-	-	-	6 April -	7	28 April
27 " -	9 " -	5 April -	12 " -	13 April -	9	25 April -	-	-	-
4 April -	16 " -	12 " -	18 " -	-	-	-	19 April -	9	11 May
12 " -	26 " -	20 " -	26 " -	27 April -	5	11 May -	-	-	-
20 " -	3 May -	28 " -	4 May -	-	-	-	6 May -	14	29 May
27 " -	10 " -	5 May -	11 " -	13 May -	6	27 May -	-	-	-
4 May -	17 " -	12 " -	18 " -	-	-	-	19 May -	8	12 June
12 " -	25 " -	20 " -	26 " -	27 May -	9	8 June -	-	-	-
20 " -	1 June -	28 " -	3 June -	-	-	-	4 June -	10	26 June
27 " -	8 " -	5 June -	11 " -	12 June -	7	24 June -	-	-	-
4 June -	17 " -	12 " -	19 " -	-	-	-	20 June -	10	12 July
12 " -	25 " -	21 " -	27 " -	28 June -	8	11 July -	-	-	-
20 " -	3 July -	28 " -	4 July -	-	-	-	6 July -	12	28 July
27 " -	11 " -	5 July -	12 " -	13 July -	7	24 July -	-	-	-
4 July -	17 " -	12 " -	18 " -	-	-	-	19 July -	12	11 August
12 " -	26 " -	20 " -	26 " -	27 July -	9	8 August -	-	-	-
20 " -	3 August -	28 " -	4 August -	-	-	-	10 August -	13	31 August
27 " -	8 " -	5 August -	11 " -	13 August -	7	24 August -	-	-	-
4 August -	17 " -	12 " -	18 " -	-	-	-	20 August -	17	9 September
12 " -	26 " -	20 " -	26 " -	28 August -	7	11 September	-	-	-
20 " -	2 September	28 " -	3 September	-	-	-	7 September	12	28 September
27 " -	11 " -	6 September	12 " -	15 September	15	27 September	-	-	-
4 September	18 " -	13 " -	19 " -	-	-	-	23 September	15	15 October
12 " -	25 " -	20 " -	26 " -	27 September	8	13 October -	-	-	-
20 " -	4 October -	28 " -	5 October -	-	-	-	8 October -	16	2 November
27 " -	9 " -	5 October -	12 " -	13 October -	11	29 October -	-	-	-
4 October -	19 " -	12 " -	18 " -	-	-	-	20 October -	12	10 November
12 " -	25 " -	20 " -	26 " -	27 October -	7	9 November	-	-	-
20 " -	2 November	28 " -	3 November -	-	-	-	4 November -	12	4 December
27 " -	11 " -	5 November -	12 " -	13 November	16	30 November	-	-	-
4 November	17 " -	12 " -	19 " -	-	-	-	20 November -	12	14 December
12 " -	26 " -	20 " -	26 " -	28 November -	8	14 December -	-	-	-
1866.									
20 " -	7 December -	29 " -	6 December -	-	-	-	10 December -	12	4 January
27 " -	9 " -	6 December -	14 " -	15 December -	7	29 December -	-	-	-
1866.									
4 December	18 " -	13 " -	20 " -	-	-	-	21 December -	18	14 January
1866.									
12 " -	27 " -	20 " -	26 " -	30 December -	6	13 January -	-	-	-
1866.									
20 " -	2 January -	28 " -	3 January -	-	-	-	5 January -	9	29 January
1866.									
27 " -	10 " -	5 January -	11 " -	11 January -	13	28 January -	-	-	-

SUMMARY of the foregoing RETURN showing the manner in which the CONTRACT PACKET SERVICE

OUTWARDS.

Between London and				Number of Single Voyages.	Number of Times Before Time.	Number of Times After Time.	
Calcutta	-	-	-	1864 - -	24	19	5
				1865 - -	24	20	4
Bombay	-	-	-	1864 - -	24	13	11
				1865 - -	24	11	13
				96	63	33	

and Oriental Steam Navigation Company employed in the Conveyance of the Indian Mails, &c.—continued.

HOMeward ROUTE.

Calcutta to Suez.			Bombay to Suez.			Alexandria to Marseilles.		Alexandria to Southampton.	
Left Calcutta (and heads).	Stop at Aden.	Arrived at Suez.	Left Bombay.	Stop at Aden.	Arrived at Suez.	Left Alexandria.	Arrived at Marseilles.	Left Alexandria.	Arrived at Southampton.
	Hours.			Hours.					
January -	7	15 February -	14 February -	8	27 February	18 February -	26 February -	19 February -	7 March.
February -	10	3 March -	1 March -	10	16 March -	28 " -	8 March -	28 " -	15 " -
February -	13	19 March -	14 March -	11	26 March -	7 March -	13 " -	8 March -	22 " -
March -	16	1 April -	29 March -	11	12 April -	21 " -	24 " -	17 " -	31 " -
March -	13	16 April -	14 April -	8	28 April -	28 " -	3 April -	28 " -	4 April.
April -	7	4 May -	29 April -	9	15 May -	3 " -	10 " -	5 April -	11 " -
April -	19	17 May -	14 May -	10	27 May -	14 " -	20 " -	14 " -	18 " -
May -	8	7 June -	24 May -	22	8 June -	19 " -	25 " -	17 " -	26 " -
May -	15	26 June -	9 June -	21	26 June -	29 " -	5 May -	29 " -	30 " -
June -	8	6 July -	12 July -	8	28 July -	16 " -	12 " -	16 " -	12 May.
June -	8	27 July -	9 July -	15	26 July -	19 " -	22 " -	19 " -	19 " -
July -	7	6 August -	24 July -	12	12 August -	28 " -	3 June -	23 " -	31 " -
July -	18	17 August -	9 August -	13	26 August -	9 June -	14 " -	9 June -	9 June.
August -	11	5 September -	25 August -	25	17 September -	11 " -	17 " -	9 " -	20 " -
August -	11	21 September -	9 September -	13	30 September -	27 " -	4 July -	27 " -	21 " -
September -	13	6 October -	30 September -	9	12 October -	18 " -	4 " -	28 " -	10 July.
September -	16	14 October -	15 October -	10	28 October -	28 " -	15 " -	8 July -	22 " -
October -	14	1 November -	29 October -	9	13 November -	19 " -	26 " -	22 " -	7 August.
October -	10	14 November -	14 November	7	26 November	29 " -	3 August -	27 " -	11 " -
November -	15	4 December -	29 November	9	12 December	7 August -	13 " -	7 August -	10 " -
November -	12	16 December -	14 December	13	28 December	14 " -	20 " -	14 " -	28 " -
December -	12	31 December -	29 December	12	11 January -	18 " -	25 " -	19 " -	1 September.
						22 " -	28 " -	23 " -	11 " -
						1 October -	8 October -	2 October -	6 " -
						8 " -	14 " -	8 " -	22 " -
						14 " -	20 " -	14 " -	28 " -
						20 " -	26 " -	20 " -	4 November.
						29 " -	4 November -	29 " -	12 " -
						3 November -	9 " -	3 November -	15 " -
						14 " -	21 " -	14 " -	28 " -
						19 " -	26 " -	20 " -	2 December.
						27 " -	4 December -	27 " -	10 " -
						8 December -	15 " -	7 December -	22 " -
						14 " -	21 " -	14 " -	27 " -
						19 " -	25 " -	20 " -	1866.
						30 " -	6 January -	30 " -	2 January.
						1866.	1866.	1866.	14 { Having called
						3 January -	11 " -	4 January -	at Marseilles.
						12 " -	18 " -	12 January -	18 January.
									24 " -

been performed between this Country and the *East Indies* during the Years 1864 and 1865.

HOMEWARDS.

Between		Number of Single Voyages.	Number of Times Before Time.	Number of Times After Time.
Calcutta and	Marseilles - {1864}	48	14	10
	Southampton {1865}		11	13
	Marseilles - {1864}	48	18	6
	Southampton {1865}		13	11
Bombay and	Marseilles - {1864}	48	11	13
	Southampton {1865}		5	19
	Marseilles - {1864}	48	15	9
	Southampton {1865}		12	12
		192	99	93

No. 4.

TIME TABLE OF INDIA, CHINA, AUSTRALIA, and MAURITIUS MAIL SERVICES,

Contract Time for the Transit through Egypt of the Marseilles portion of the Mails - - - 24 hours.

O U T W A R D R O U T E.

Southampton to Alexandria.			Marseilles to Alexandria.			Suez to Bombay.			Suez to Mauritius (calling at Seychelles).†			Suez to Calcutta.			Ceylon to Sydney.			Bombay to Hong Kong.			Hong Kong to Shanghai.										
STEAMER.			MAIL.			STEAMER.			STEAMER.			STEAMER.			STEAMER.			STEAMER.			STEAMER.										
Arrives at			Leaves			Arrives at			Leaves			Arrives at			Leaves			Arrives at			Leaves										
Gib- raltar.			Alex- andria.			Alex- andria.			Suez.			Aden.			King- George's Sound.			Mel- bourne.			Hong Kong.										
Leaves			Arrives at			Leaves			Arrives at			Leaves			Arrives at			Leaves			Arrives at										
South- ampton.			London.			Malta.			Aden.			Suez.			Aden.			King- George's Sound.			Mel- bourne.			Hong Kong.							
4	Jan.	9	13	17	Jan.	11	13	15	Jan.	19	-	-	-	20	26	6	10	14	-	-	-	20	6	12	14	23	25	1	-	-	-
12	Jan.	17	21	25	Jan.	18	20	22	Jan.	26	27	-	-	-	26	31	7	11	15	-	-	-	26	1	7	9	11	16	-	-	-
20	Jan.	25	29	2	Jan.	26	28	30	Jan.	3	-	-	-	4	10	21	25	29	-	-	-	4	10	21	27	31	3	-	-	-	
27	Jan.	1	5	9	Jan.	3	5	7	Jan.	11	-	-	-	19	25	31	5	9	-	-	-	19	25	31	5	9	11	16	-	-	-
4	Feb.	9	13	17	Feb.	10	12	14	Feb.	18	-	-	-	26	31	6	10	14	-	-	-	26	1	7	9	11	16	-	-	-	-
12	Feb.	17	21	25	Feb.	18	20	22	Feb.	26	4	-	-	-	5	11	17	21	25	-	-	-	5	11	17	21	25	-	-	-	-
20	Feb.	25	29	4	Feb.	26	28	30	Feb.	5	-	-	-	12	18	24	30	5	-	-	-	12	18	24	30	5	-	-	-	-	
27	Feb.	3	7	11	Feb.	3	5	7	Feb.	11	-	-	-	19	25	31	6	10	-	-	-	19	25	31	6	-	-	-	-	-	
4	Mar.	9	13	17	Mar.	10	12	14	Mar.	18	-	-	-	26	31	6	10	14	-	-	-	26	1	7	9	11	16	-	-	-	-
12	Mar.	17	21	25	Mar.	18	20	22	Mar.	26	27	-	-	-	5	11	17	21	25	-	-	-	5	11	17	21	25	-	-	-	-
20	Mar.	25	29	2	Mar.	26	28	30	Mar.	3	-	-	-	10	16	22	28	3	-	-	-	10	16	22	28	3	-	-	-	-	
27	Mar.	1	5	9	Mar.	4	6	8	Mar.	12	-	-	-	17	23	29	4	8	-	-	-	17	23	29	4	-	-	-	-	-	
4	Apr.	9	13	17	Apr.	11	13	15	Apr.	19	-	-	-	24	30	6	12	18	-	-	-	24	30	6	-	-	-	-	-	-	-
12	Apr.	17	21	25	Apr.	18	20	22	Apr.	26	27	-	-	-	31	5	11	15	-	-	-	31	5	11	15	-	-	-	-	-	-
20	Apr.	25	29	3	Apr.	26	28	30	Apr.	4	-	-	-	1	7	13	19	25	-	-	-	1	7	13	19	25	-	-	-	-	-
27	Apr.	2	6	10	Apr.	3	5	7	Apr.	11	-	-	-	8	14	20	26	3	-	-	-	8	14	20	26	3	-	-	-	-	-
4	May	9	13	17	May	10	12	14	May	18	-	-	-	15	21	27	3	7	-	-	-	15	21	27	3	-	-	-	-	-	-
12	May	17	21	25	May	18	20	22	May	26	27	-	-	-	22	28	4	10	14	-	-	-	22	28	4	-	-	-	-	-	-
20	May	25	29	2	May	26	28	30	May	3	-	-	-	29	4	10	16	22	-	-	-	29	4	10	16	22	-	-	-	-	-
27	May	1	5	9	May	3	5	7	May	11	-	-	-	5	11	17	23	29	-	-	-	5	11	17	23	29	-	-	-	-	-
4	June	9	13	17	June	10	12	14	June	18	-	-	-	12	18	24	30	5	-	-	-	12	18	24	30	5	-	-	-	-	-
12	June	17	21	25	June	18	20	22	June	26	27	-	-	-	19	25	31	6	10	-	-	19	25	31	6	-	-	-	-	-	-
20	June	25	29	3	June	26	28	30	June	3	-	-	-	26	31	6	12	18	-	-	-	26	31	6	-	-	-	-	-	-	-
27	June	2	6	10	July	4	6	8	July	12	-	-	-	3	9	15	21	27	-	-	-	3	9	15	21	27	-	-	-	-	-
4	July	6	10	14	July	6	8	10	July	13	-	-	-	10	16	22	28	3	-	-	-	10	16	22	28	3	-	-	-	-	-

* On Sundays at 9 A.M.

† Except in June, July, and August.



for the Year 1864. Approved by the Postmaster General on the 2d November 1863.

Contract Time for the Transit through Egypt of the Southampton portion of the Mails - - - 44 hours.

H O M E W A R D R O U T E.

Shanghai to Hong Kong.			Hong Kong to Bombay.			Sydney to Ceylon.			Calcutta to Suez.			Mauritius to Suez (calling at Reunion and Seychelles).		Bombay to Suez.		Alexandria to Marseilles.		Alexandria to Southampton.	
STEAMER.			STEAMER.			STEAMER.			STEAMER.			STEAMER.		STEAMER.		STEAMER.		STEAMER.	
Leaves	Arrives at		Leaves	Arrives at		Leaves	Arrives at		Leaves	Arrives at		Leaves	Arrives at		Leaves	Arrives at		Leaves	Arrives at
Shanghai,	Hong Kong.		Hong Kong.	Singapore.	Pe- nang.	Galle.	Bon- bay.		Hong Kong.	Singapore.	Pe- nang.	Galle.	Bon- bay.		Hong Kong.	Singapore.	Pe- nang.	Galle.	Bon- bay.
5 A.M. 1863 13 9 Dec.	1863 13 15 Dec.	1863 21 Dec.	1863 24 Dec.	1863 30 Dec.	1863 5 Jan.	1863 10 Jan.	1863 16 Jan.	1863 22 Jan.	1863 28 Jan.	1863 3 Feb.	1863 9 Feb.	1863 15 Feb.	1863 21 Feb.	1863 27 Feb.	1863 3 Mar.	1863 9 Mar.	1863 15 Mar.	1863 21 Mar.	1863 27 Mar.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.	1864 15 Apr.	1864 21 Apr.	1864 27 Apr.
26 Dec.	30 Dec.	1 Jan.	7 Jan.	10 Jan.	16 Jan.	22 Jan.	28 Jan.	3 Feb.	9 Feb.	16 Feb.	22 Feb.	28 Feb.	3 Mar.	9 Mar.	16 Mar.	22 Mar.	28 Mar.	3 Apr.	9 Apr.
1864 9 Jan.	1864 13 Jan.	1864 21 Jan.	1864 24 Jan.	1864 30 Jan.	1864 5 Feb.	1864 10 Feb.	1864 16 Feb.	1864 22 Feb.	1864 28 Feb.	1864 3 Mar.	1864 9 Mar.	1864 15 Mar.	1864 21 Mar.	1864 27 Mar.	1864 3 Apr.	1864 9 Apr.</			

OUTWARD ROUTE.

[illegible]

Year 1864. Approved by the Postmaster General on the 2d November 1863—continued.

H O M E W A R D R O U T E.

Shanghai to Hong Kong.			Hong Kong to Bombay.				Sydney to Ceylon.				Calcutta to Suez.				Mauritius to Suez (calling at Reunion and Seychelles).		Bombay to Suez.		Alexandria to Marseilles.			Alexandria to Southampton.		
STEAMER.			STEAMER.				STEAMER.				STEAMER.				STEAMER.		STEAMER.		STEAMER.			STEAMER.		
Leaves			Arrives at		Leaves		Arrives at		Leaves		Arrives at		Leaves		Arrives at		Leaves		Arrives at		Leaves		Arrives at	
Shanghai.	Hong Kong.		Singapore.	Penang.	Galle.	Bombay.	King George's Sound.	Melbourne.	Melbourne.	Sydney.	Calcutta (Sand heads).	Madras.	Galle.	Aden.	Suez.	Mauritius.	Aden.	Suez.	Bombay.	Aden.	Suez.	Alexandria.	Malta.	Southampton.
5 A.M.	1864		* 2 P.M.			6	1864	2 P.M.	1864	2 P.M.	1864	1864	1864	12	18							20	24	a 2
6	11		1864	1864	1864	30	1864	1864	1864	1864	27	24	1	7	18	6	19	26	9	20	26	20	24	28
																						28	1	a 10
22	27		29	6	9	22	1	26	25	22	10	13	17	28	3							5	9	a 18
																						12	16	a 25
5	10		12	20	23	5					24	27	31	11	17				24	4	10	12	16	a 25
																						19	23	a 1
																						Aug.	Aug.	Aug.
22	27		29	6	9	22	31	26	25	22	10	13	17	28	3	6	19	26	9	20	26	28	1	5
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
5	10		12	20	23	5																Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
22	27		29	6	9	22	31	26	25	22	10	13	17	28	3							Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
21	26		28	6	9	22	31	26	25	22	10	13	17	28	3	6	19	26	9	20	26	28	1	5
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
4	9		6 11	20	23	6																Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
21	25		6 27	6	9	22	31	26	25	22	10	13	17	28	3	6	19	26	9	20	26	28	1	5
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
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																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.
																						Aug.	Aug.	Aug.

TABLE showing the Proposed Movements of the CONTRACT MAIL STEAM PACKETS of the PENINSULAR and ORIENTAL

OUTWARD ROUTE.

[illegible]

* On Sundays, at 9 A.M.

+ Except in June, July, and August.

+ Except in June, July, and August.



No. 6.—TABLE showing the Proposed Movements of the Contract Mail Steam Packets of the Peninsular and Oriental

OUTWARD ROUTE.

Southampton to Alexandria.			Marseilles to Alexandria.			Suez to Bombay.			Suez to Mauritius (calling at Seychelles).†			Suez to Calcutta.					Ceylon to Sydney.					Bombay to Hong Kong.					Hong Kong to Shanghai.				
Leaves		Arrives at	Leaves		Arrives at	Leaves		Arrives at	Leaves		Arrives at	Leaves		Arrives at			Leaves		Arrives at			Leaves		Arrives at							
South- ampton.	Gib- raltar.	Malta.	Alex- andria.	London.	Mar- sailles.	Malta.	Alex- andria.	Suez.	Aden.	Bombay.	Suez.	Aden.	Mau- ritius.	Suez.	Aden.	Galle.	Madras.	Calcutta.	Galle.	King's George's Sound.	Mel- bourne.	Mel- bourne.	Sydney.	Bombay.	Galle.	Pi- nan- g.	Sing- apore.	Hong Kong.	Hong Kong.	Shanghai.	
* 2 P.M.																															
4 July	9 July	13 July	17 July	10 July	12 July	14 July	18 July	-	-	-	-	-	-	19 July	25 July	5 Aug.	9 Aug.	13 Aug.	-	-	-	-	-	30 July	5 Aug.	11 Aug.	13 Aug.	22 Aug.	23 Aug.	28 Aug.	
12 July	17 July	21 July	25 July	18 July	20 July	22 July	26 July	27 Aug.	2 Aug.	10 Aug.	-	-	-	-	-	-	5 Aug.	9 Aug.	-	-	-	-	-	15 Aug.	21 Aug.	27 Aug.	29 Aug.	7 Sept.	8 Sept.	13 Sept.	
20 July	25 July	29 July	2 Aug.	26 July	28 July	30 July	3 Aug.	-	-	-	4 Aug.	10 Aug.	24 Aug.	4 Aug.	10 Aug.	21 Aug.	25 Aug.	-	-	-	-	-	-	15 Aug.	21 Aug.	27 Aug.	29 Aug.	7 Sept.	8 Sept.	13 Sept.	
27 July	1 Aug.	5 Aug.	9 Aug.	3 Aug.	5 Aug.	7 Aug.	11 Aug.	12 Aug.	18 Aug.	26 Aug.	-	-	-	-	-	-	9 Sept.	13 Sept.	-	-	-	-	-	30 Aug.	5 Sept.	11 Sept.	13 Sept.	22 Sept.	23 Sept.	28 Sept.	
4 Aug.	9 Aug.	13 Aug.	17 Aug.	10 Aug.	12 Aug.	14 Aug.	18 Aug.	-	-	-	-	-	-	19 Aug.	25 Aug.	5 Sept.	9 Sept.	13 Sept.	-	-	-	-	-	30 Aug.	5 Sept.	11 Sept.	13 Sept.	22 Sept.	23 Sept.	28 Sept.	
12 Aug.	17 Aug.	21 Aug.	25 Aug.	18 Aug.	20 Aug.	22 Aug.	26 Aug.	27 Aug.	2 Sept.	10 Sept.	-	-	-	-	-	-	9 Sept.	13 Sept.	-	-	-	-	-	15 Sept.	21 Sept.	27 Sept.	29 Sept.	7 Oct.	8 Oct.	14 Oct.	
20 Aug.	25 Aug.	29 Aug.	2 Sept.	26 Aug.	28 Aug.	30 Aug.	3 Sept.	-	-	-	4 Sept.	10 Sept.	24 Sept.	4 Sept.	10 Sept.	21 Sept.	25 Sept.	-	-	-	-	-	-	15 Sept.	21 Sept.	27 Sept.	29 Sept.	7 Oct.	8 Oct.	14 Oct.	
27 Aug.	1 Sept.	5 Sept.	9 Sept.	4 Sept.	6 Sept.	8 Sept.	12 Sept.	13 Sept.	19 Sept.	27 Sept.	-	-	-	-	-	-	9 Sept.	13 Sept.	-	-	-	-	-	30 Sept.	5 Oct.	11 Oct.	13 Oct.	22 Oct.	23 Oct.	28 Oct.	
4 Sept.	9 Sept.	13 Sept.	17 Sept.	11 Sept.	13 Sept.	15 Sept.	19 Sept.	-	-	-	-	-	-	20 Sept.	26 Sept.	7 Oct.	11 Oct.	15 Oct.	-	-	-	-	-	30 Sept.	5 Oct.	11 Oct.	13 Oct.	22 Oct.	23 Oct.	28 Oct.	
12 Sept.	17 Sept.	21 Sept.	25 Sept.	18 Sept.	20 Sept.	22 Sept.	26 Sept.	27 Sept.	3 Oct.	11 Oct.	-	-	-	-	-	-	9 Oct.	13 Oct.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
20 Sept.	25 Sept.	29 Sept.	3 Oct.	26 Sept.	28 Sept.	30 Sept.	4 Oct.	-	-	-	5 Oct.	11 Oct.	25 Oct.	5 Oct.	11 Oct.	22 Oct.	26 Oct.	30 Oct.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
27 Sept.	2 Oct.	6 Oct.	10 Oct.	3 Oct.	5 Oct.	7 Oct.	11 Oct.	12 Oct.	18 Oct.	26 Oct.	-	-	-	-	-	-	9 Oct.	13 Oct.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
4 Oct.	9 Oct.	13 Oct.	17 Oct.	10 Oct.	12 Oct.	14 Oct.	18 Oct.	-	-	-	-	-	-	19 Oct.	25 Oct.	5 Nov.	9 Nov.	13 Nov.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
12 Oct.	17 Oct.	21 Oct.	25 Oct.	18 Oct.	20 Oct.	22 Oct.	26 Oct.	27 Oct.	2 Nov.	10 Nov.	-	-	-	-	-	-	9 Nov.	13 Nov.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
20 Oct.	25 Oct.	29 Oct.	2 Nov.	26 Oct.	28 Oct.	30 Oct.	3 Nov.	-	-	-	4 Nov.	10 Nov.	24 Nov.	4 Nov.	10 Nov.	21 Nov.	25 Nov.	-	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
27 Oct.	1 Nov.	5 Nov.	9 Nov.	3 Nov.	5 Nov.	7 Nov.	11 Nov.	12 Nov.	18 Nov.	26 Nov.	-	-	-	-	-	-	9 Nov.	13 Nov.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
4 Nov.	9 Nov.	13 Nov.	17 Nov.	10 Nov.	12 Nov.	14 Nov.	18 Nov.	-	-	-	-	-	-	19 Nov.	25 Nov.	5 Dec.	9 Dec.	13 Dec.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
12 Nov.	17 Nov.	21 Nov.	25 Nov.	18 Nov.	20 Nov.	22 Nov.	26 Nov.	27 Nov.	3 Dec.	11 Dec.	-	-	-	-	-	-	9 Dec.	13 Dec.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
20 Nov.	25 Nov.	29 Nov.	3 Dec.	27 Nov.	29 Nov.	1 Dec.	5 Dec.	-	-	-	6 Dec.	12 Dec.	26 Dec.	6 Dec.	12 Dec.	23 Dec.	27 Dec.	31 Dec.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
27 Nov.	2 Dec.	6 Dec.	10 Dec.	27 Nov.	29 Nov.	1 Dec.	5 Dec.	13 Dec.	19 Dec.	27 Dec.	-	-	-	-	-	-	9 Dec.	13 Dec.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
4 Dec.	9 Dec.	13 Dec.	17 Dec.	11 Dec.	13 Dec.	15 Dec.	19 Dec.	-	-	-	-	-	-	20 Dec.	26 Dec.	6 Jan.	10 Jan.	14 Jan.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
12 Dec.	17 Dec.	21 Dec.	25 Dec.	18 Dec.	20 Dec.	22 Dec.	26 Dec.	27 Dec.	1866	10 Jan.	-	-	-	-	-	-	9 Dec.	13 Dec.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
20 Dec.	25 Dec.	29 Dec.	1866	26 Dec.	28 Dec.	30 Dec.	1866	-	-	-	1866	10 Jan.	24 Jan.	4 Jan.	10 Jan.	21 Jan.	25 Jan.	29 Jan.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	
27 Dec.	1866	1866	1866	1866	1866	1866	1866	1866	18 Jan.	26 Jan.	-	-	-	-	-	-	9 Dec.	13 Dec.	-	-	-	-	-	15 Oct.	21 Oct.	27 Oct.	29 Oct.	7 Nov.	8 Nov.	14 Nov.	

* On Sundays at 9 A.M.

† Except in June, July, and August.



Steam Navigation Company, for the Year 1865. Approved by Her Majesty's Postmaster General on 21st October 1864—continued.

HOMEWARD ROUTE.

Shanghai to Hong Kong.		Hong Kong to Bombay.				Sydney to Ceylon.				Calcutta to Suez.				Mauritius to Suez (calling at Seychelles).		Bombay to Suez.		Alexandria to Marseilles.			Alexandria to Southampton.				
Leaves	Arrives at	Leaves	Arrives at	Leaves	Arrives at	Leaves	Arrives at	Leaves	Arrives at	Leaves	Arrives at	Leaves	Arrives at	Leaves	Arrives at	Leaves	Arrives at	Leaves	Arrives at	Leaves	Arrives at	Leaves	Arrives at		
Shanghai.	Hong Kong.	Hong Kong.	Singapore.	Penang.	Galle.	Bombay.	King George's Sound.	Galle.	Calcutta (Sand-heads).	Madras.	Galle.	Aden.	Suez.	Mauritius.	Aden.	Suez.	Bombay.	Alexandria.	Malta.	London.	Alexandria.	Malta.	Southampton.		
5 A.M. 1865 6 June	-	1865 11 June	-	1865 20 June	1865 30 June	6 July	1865 1 July	1865 1 July	1865 24 June	1865 27 June	1865 1 July	1865 3 July	1865 6 July	6 P.M. 7 July	20 July	26 July	10 A.M. 9 July	19 July	22 July	25 July	27 July	20 July	24 July	28 July	
22 June	27 June	29 June	6 July	9 July	16 July	22 July	1 July	17 July	10 July	13 July	17 July	28 July	3 Aug.	-	-	-	24 July	11 Aug.	14 Aug.	17 Aug.	19 Aug.	25 July	28 July	5 Aug. †	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug. †	
5 July	10 July	12 July	20 July	23 July	30 July	5 Aug.	-	-	24 July	27 July	31 Aug.	11 Aug.	17 Aug.	-	-	-	9 Aug.	18 Aug.	21 Aug.	24 Aug.	26 Aug.	23 Aug.	27 Aug.	1 Sept.	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	7 Aug.	20 Aug.	26 Aug.	-	27 Aug.	30 Aug.	2 Sept.	4 Sept.	1 Sept.	5 Sept.	10 Sept.	
23 July	27 July	29 July	6 Aug.	9 Aug.	16 Aug.	22 Aug.	31 July	16 Aug.	10 Aug.	13 Aug.	17 Aug.	28 Aug.	3 Sept.	-	-	-	-	4 Sept.	7 Sept.	10 Sept.	12 Sept.	9 Sept.	13 Sept.	18 Sept.	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24 Aug.	-	11 Sept.	14 Sept.	17 Sept.	13 Sept.	16 Sept.	25 Sept.	
5 Aug.	10 Aug.	12 Aug.	20 Aug.	23 Aug.	30 Aug.	5 Sept.	-	-	24 Aug.	27 Aug.	31 Aug.	11 Sept.	17 Sept.	-	-	-	-	18 Sept.	21 Sept.	24 Sept.	26 Sept.	19 Sept.	23 Sept.	2 Sept.	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	7 Sept.	20 Sept.	26 Sept.	-	27 Sept.	30 Sept.	3 Oct.	5 Oct.	28 Oct.	2 Oct.	6 Oct.	11 Oct.
21 Aug.	26 Aug.	28 Aug.	6 Sept.	9 Sept.	16 Sept.	22 Sept.	31 Aug.	16 Sept.	10 Sept.	13 Sept.	17 Sept.	28 Sept.	4 Oct.	-	-	-	-	5 Oct.	8 Oct.	11 Oct.	13 Oct.	6 Oct.	10 Oct.	19 Oct.	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29 Sept.	13 Oct.	16 Oct.	19 Oct.	21 Oct.	14 Oct.	18 Oct.	27 Oct.	
4 Sept.	9 Sept.	11 Sept.	20 Sept.	23 Sept.	30 Sept.	6 Oct.	-	-	24 Sept.	27 Sept.	1 Oct.	12 Oct.	18 Oct.	-	-	-	-	19 Oct.	22 Oct.	25 Oct.	27 Oct.	20 Oct.	24 Oct.	2 Oct.	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	7 Oct.	20 Oct.	26 Oct.	-	28 Oct.	31 Oct.	3 Nov.	5 Nov.	29 Oct.	2 Oct.	6 Nov.	11 Nov.
21 Sept.	25 Sept.	27 Sept.	6 Oct.	9 Oct.	16 Oct.	22 Oct.	1 Oct.	17 Oct.	10 Oct.	13 Oct.	17 Oct.	28 Oct.	3 Nov.	-	-	-	-	4 Nov.	7 Nov.	10 Nov.	12 Nov.	5 Nov.	9 Nov.	18 Nov.	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29 Oct.	12 Nov.	15 Nov.	18 Nov.	20 Nov.	13 Nov.	17 Nov.	26 Nov.	
9 Oct.	13 Oct.	15 Oct.	21 Oct.	24 Oct.	30 Oct.	5 Nov.	-	-	24 Oct.	27 Oct.	31 Oct.	11 Nov.	17 Nov.	-	-	-	-	18 Nov.	21 Nov.	24 Nov.	26 Nov.	19 Nov.	23 Nov.	2 Nov.	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	7 Nov.	20 Nov.	26 Nov.	-	28 Nov.	1 Dec.	4 Dec.	6 Dec.	29 Nov.	3 Dec.	7 Dec.	12 Dec.
26 Oct.	30 Oct.	1 Nov.	7 Nov.	10 Nov.	16 Nov.	22 Nov.	31 Oct.	16 Nov.	10 Nov.	13 Nov.	17 Nov.	28 Nov.	4 Dec.	-	-	-	-	5 Dec.	8 Dec.	11 Dec.	13 Dec.	6 Dec.	10 Dec.	19 Dec.	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6 Dec.	12 Dec.	29 Nov.	13 Dec.	16 Dec.	19 Dec.	21 Dec.	14 Dec.	18 Dec.	27 Dec.	
9 Nov.	13 Nov.	15 Nov.	21 Nov.	24 Nov.	30 Nov.	6 Dec.	-	-	24 Nov.	27 Nov.	1 Dec.	12 Dec.	18 Dec.	-	-	-	-	19 Dec.	22 Dec.	25 Dec.	27 Dec.	20 Dec.	24 Dec.	28 Dec.	1866 2 Jan.
-	-	-	-	-	-	-	-	-	-	-	-	-	-	7 Dec.	20 Dec.	26 Dec.	-	28 Dec.	31 Dec.	1866 3 Jan.	1866 5 Jan.	1866 2 Jan.	28 Dec.	11 Jan.	
25 Nov.	29 Nov.	1 Dec.	7 Dec.	10 Dec.	16 Dec.	22 Dec.	1 Dec.	17 Dec.	10 Dec.	13 Dec.	17 Dec.	28 Dec.	3 Jan.	-	-	-	14 Dec.	1866 4 Jan.	1866 7 Jan.	10 Jan.	12 Jan.	5 Jan.	9 Jan.	18 Jan.	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11 Jan.	1866 5 Jan.	29 Dec.	12 Jan.	15 Jan.	18 Jan.	20 Jan.	13 Jan.	17 Jan.	26 Jan.	

* On Sundays at 9 A.M.
† On these occasions, owing to the prevalence of the south-west monsoon, the arrivals of the packets at Suez are likely to be retarded, and the delivery of the Mails at Marseilles and Southampton affected in a corresponding degree.
‡ Six days extra are allowed to the Bombay Packets in May, June, and July. Four days are taken in this Time Table.
0.43.

App. No. 1.

— No. 6. —

RETURN of the RATE of CHARGES and DEDUCTIONS, and AMOUNT payable for the Year 1865, under the CONTRACTS for the CONVEYANCE of MAILS between *England* and *India, Ceylon, Mauritius, China, and Australia*, viâ *Alexandria*, in continuation of a similar RETURN for the Years 1863 and 1864, printed in page 46 of Parliamentary Paper, No. 276 of 1865.

SERVICES.	Rates of Charges, 1865.			Deductions, 1865.			Amounts payable, 1865.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
Alexandria, Ceylon, Calcutta, Hong Kong, and England, including a Branch from Marseilles to Malta -	162,124 18 -			{ a 15,000 - - c 1,687 10 -			{ b 145,512 8 -		
Aden and Bombay - - - -	22,000 - -			- - -			22,000 - -		
Extra Services to India - - -	21,000 - -			- - -			21,000 - -		
Extra Services from Southampton to Alexandria, for Bombay Mails -	20,500 - -			- - -			20,500 - -		
Extra Service Monthly between Bombay and China - - - -	24,000 - -			- - -			24,000 - -		
Point de Galle and Sydney - - -	d 134,672 - -			{ e 2,100 - - c 187 10 -			{ 132,384 10 -		
Suez, Aden, and Mauritius f - -	36,000 - -			g 1,000 - -			35,000 - -		

- a For abandonment of reduced fares for Government passengers.
- b Including 75 l., excess of Premiums over Penalties.
- c For 4½ months' proportion of 5,000 l. a year allowed for the discontinuance of Admiralty Surveys of Peninsular and Oriental Steam Navigation Company's Vessels.
- d Reduced to 120,000 l. on and from 1st February 1866.
- e Excess of Penalties over Premiums.
- f This contract was entered into by the Postmaster General on behalf of the Government of Mauritius.
- g Penalties.

General Post Office, }
17 March 1866. }

George Chetwynd,
Receiver and Accountant-General.

— No. 7. —

STATEMENT of the VOYAGES performed by the MAIL PACKETS of the PENINSULAR and ORIENTAL STEAM NAVIGATION COMPANY in the Year 1865, under their CONTRACTS for the INDIA MAIL SERVICE; the Distance run, and the Rate of Speed.

SERVICE.	Number of Single Voyages.	Distance run in Nautical Miles.	Average Speed per Hour in Nautical Miles.
Southampton and Alexandria - -	96	285,600	9½
Marseilles and Alexandria - - -	96	140,640	10
Suez and Bombay - - - -	48	142,656	9
Suez and Calcutta - - - -	48	228,336	10

— No. 8. —

CONTRACT, 27th February 1866.

ARTICLES OF AGREEMENT made and entered into the 27th day of February, in the year 1866, between The Right Honourable Edward John Lord Stanley of Alderley, Her Majesty's Postmaster General (on behalf of Her Majesty) of the one part, and The Peninsular and Oriental Steam Navigation Company of the other part.

WHEREAS by two several articles of agreement, dated respectively the 1st day of January 1853 and the 7th day of July 1854, and respectively made between the said Company of the one part, and the Commissioners for executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, for and on behalf of Her Majesty, of the other part, for the considerations therein respectively mentioned, the said Company contracted and agreed to convey Her Majesty's mails to and from the several places and in manner therein respectively mentioned.

And whereas by virtue of an Act of Parliament passed in the 23d year of the reign of Her present Majesty, intituled "An Act to transfer to the Postmaster General Securities entered into with the Commissioners of the Admiralty in relation to the Packet Service," all the interests, rights, powers, and authorities of the said Commissioners under the hereinbefore-recited contracts were transferred to and are now vested in the said Postmaster General:

And whereas by articles of agreement, dated the 1st day of June 1861, and made between the said Company of the one part, and the said Edward John Lord Stanley of Alderley, Her Majesty's Postmaster General for the time being of the other part, for the considerations therein mentioned it was, amongst other things, agreed, that, from the annual sum for the time being payable to the said Company under the said contracts of the 1st day of January 1853 and the 7th day of July 1854, there should be retained or deducted by the Postmaster General for the time being an annual sum after the rate of 15,000 £:

And whereas by articles of agreement, dated the 16th day of April 1861, and made between the said Company of the one part, and the said Edward John Lord Stanley of Alderley, Her Majesty's Postmaster General for the time being, of the other part, for the considerations therein mentioned, the said Company contracted and agreed to convey Her Majesty's mails to and from the several places and in manner therein mentioned:

And whereas by articles of agreement, dated the 17th day of November 1865, and made between the said Edward John Lord Stanley of Alderley, Her Majesty's Postmaster General for the time being of the one part, and the said Company of the other part, for the considerations therein mentioned, the said Company contracted and agreed to convey Her Majesty's mails to and from the several places and in manner therein mentioned:

And whereas it has been agreed between the parties hereto, that the terms of the several hereinbefore recited contracts shall be modified in manner hereinafter appearing:

Now these presents witness, and each of them the said Company and the said Postmaster General do, and doth for themselves and himself, their and his successors and assigns, covenant, agree, and declare with and to the other of them the said Company and the said Postmaster General, their and his successors and assigns, in manner following: (that is to say),

1. Except as hereinafter provided, Her Majesty's Postmaster General hereby releases the said Company from the obligation of those parts of the said articles of agreement of the 1st day of January 1853, which provide,

(1.) That the vessels, engines, equipments, engineers, officers, and crew employed in and about the services therein mentioned, shall be subject in the first instance, and from time to time and at all times afterwards, to the approval of the said Commissioners of the Admiralty, and of such other persons as shall at any time or times, or from time to time, have authority under the said Commissioners to inspect and examine the same.

(2.) That the said Company shall, previously to any vessel being built for or which is intended to be employed in the performance of the said contract, submit the designs, plans, and sections of each and every of such vessels to the said Commissioners, and be bound to adopt such fittings, scantling, and such dispositions of hatchways as the said Commissioners shall declare in writing to be necessary for carrying and firing the armament in the said articles of agreement in that behalf mentioned.

(3.) That the said Company shall and will from time to time, and at all times during the continuance of the said contract, make such alterations or improvements in the construction, equipments, and machinery of the vessels which shall be used in the performance of the said contract as the advanced state of science may suggest and the said Commissioners may direct; and that if at any time during the continuance of the said contract the progress of science should enable the vessels employed in the performance of the said contract to be propelled at a much greater

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speed than is therein provided, the said Commissioners may, if they think fit, order such necessary improvements to be made, granting such compensation to the said Company as may by arbitration be determined to be due for the increased expenditure, if any, arising from the making of such improvements.

(4.) That the said Commissioners shall have full power, whenever and as often as they may deem it requisite, to survey, by any of their officers or agents, all or every the vessels employed and to be employed in the performance of the said contract, and the hulls thereof, and the engines, machinery, furniture, tackle, apparel, stores, equipments, and the officers, engineers, and crew of every such vessel, and that the said vessels shall be opened in their hulls whenever the said officers may require; and that if any such vessel or any part thereof, or any engines, machinery, furniture, tackle, apparel, boats, stores, or equipments, shall on any such survey be declared by any of such officers or agents unseaworthy or not adapted to the service thereby contracted to be performed, or if the said Commissioners shall deem it necessary or expedient that any alteration or improvement shall be made therein, or in any part thereof, in order to keep pace with the more advanced state of science, every vessel which shall be disapproved of, or in which such deficiency, defect, or want of improvement shall appear, shall be deemed inefficient for any service thereby contracted to be performed, and shall not be employed again in the conveyance of Her Majesty's mails until such defect or deficiency shall have been repaired or supplied, or the alterations and improvements, as the case may be, shall have been made to the satisfaction of the said Commissioners; and that if employed before such defect or deficiency shall have been supplied, or such alterations or improvements, as the case may be, shall have been made to the satisfaction of the said Commissioners, the said Company shall forfeit and pay to Her Majesty, Her heirs and successors, the sum of 500 £.

2. Except as hereinafter provided, the rights and obligations of the Postmaster General and the said Company respectively, under the said articles of agreement of the 1st day of January 1853, shall henceforth be the same in all respects as if the provisions thereof hereinbefore set forth, and numbered 1 to 4 inclusive, had been omitted therefrom.

3. Except as hereinafter provided, Her Majesty's Postmaster General hereby releases the said Company from the obligation of those parts of the said articles of agreement of the 7th day of July 1854, which provide—

(1.) That the vessels, engines, equipments, engineers, officers, and crew employed in and about the services therein mentioned shall be subject in the first instance and from time to time and at all times afterwards to the approval of the said Commissioners, and of such other persons as shall at any time or times, or from time to time, have authority under the said Commissioners to inspect and examine the same.

(2.) That the said Company shall previously to any vessel being built for or which is intended to be employed in the performance of the said contract submit the designs, plans, and sections of each and every of such vessels to the said Commissioners, and be bound to adopt such fittings, scantling, and such dispositions of hatchways as the said Commissioners shall declare in writing to be necessary for carrying and firing the armament in the said articles of agreement in that behalf mentioned.

(3.) That the said Company shall and will, from time to time and at all times during the continuance of this contract, make such alterations or improvements in the construction, equipments, and machinery of the vessels which shall be used in the performance of the said contract as the advanced state of science may suggest and the said Commissioners may direct, and that if at any time during the continuance of the said contract the progress of science should enable the vessels employed in the performance of the said contract to be propelled at a much greater speed than thereinbefore provided, the said Commissioners may (if they think fit) order such necessary improvements to be made, granting such compensation to the said Company as may by arbitration be determined to be due for the increased expenditure, if any, arising from the making of such improvements.

(4.) That the said Commissioners shall have full power, whenever and as often as they may deem it requisite, to survey, by any of their officers or agents, all or every the vessels employed and to be employed in the performance of the said contract, and the hulls thereof, and the engines, machinery, furniture, tackle, apparel, stores, equipments, and the officers, engineers, and crew of every such vessel, the said vessels to be opened in their hulls whenever the said officers may require; and if any such vessels or any part thereof, or any engines, machinery, furniture, tackle, apparel, boats, stores, or equipments, shall on any such survey be declared by any of such officers or agents unseaworthy or not adapted to the service thereby contracted to be performed, or if the said Commissioners shall deem it necessary or expedient that any alteration or improvement shall be made therein, or any part thereof, in order to keep pace with the more advanced state of science, every vessel which shall be disapproved of, or in which such deficiency, defect, or want of improvement shall appear, shall be deemed inefficient for any service thereby contracted to be performed, and shall not be employed again in the conveyance of Her Majesty's mails until such defect or deficiency shall have been repaired or supplied, or the alterations or improvements, as the case may be, shall have been made to the satisfaction of the said Commissioners; and if employed before such defect

defect or deficiency shall have been supplied, or such alterations or improvements, as the case may be, shall have been made to the satisfaction of the said Commissioners, the said Company shall forfeit and pay to Her Majesty, Her heirs and successors, the sum of 500 £.

4. Except as hereinafter provided, the rights and obligations of the Postmaster General and the said Company respectively, under the said articles of agreement of the 7th day of July 1854, shall henceforth be the same in all respects as if the provisions thereof hereinbefore set forth and numbered 1 to 4 inclusive, had been omitted therefrom.

5. Except as hereinafter provided, Her Majesty's Postmaster General hereby releases the said Company from the obligation of those parts of the said articles of agreement of the 16th day of April 1861, which provide,—

(1.) That the vessels, engines, equipments, officers, engineers, and crew employed in or about the services therein mentioned shall be in all respects subject to the approval of the said Postmaster General, or of such other person or persons as he shall at any time or times, or from time to time, authorise to inspect and examine the same.

(2.) That the said Company shall, if required, submit the designs, plans, and sections of each vessel to be employed in the performance of the said contract to the said Postmaster General.

(3.) That the said Postmaster General shall have full power, whenever and as often as he may deem it requisite, to survey, by any of his officers or agents, all or any of the vessels employed and to be employed in the performance of the said agreement, and the hulls thereof, and the engines, machinery, furniture, tackle, apparel, stores, equipments, and the officers, engineers, and crew of every such vessel, and that for the purposes aforesaid the said vessels shall (if necessary) be opened in their hulls whenever the said officers may require; and if any such vessels, or any part thereof, or any engines, machinery, furniture, tackle, apparel, boats, stores, or equipments, shall on any such survey be declared by any of such officers or agents unseaworthy, or not adapted to the service thereby agreed to be performed, every vessel which shall be disapproved of, or in which such deficiency or defect shall appear, shall be deemed inefficient for any service thereby agreed to be performed, and shall not be employed again in the conveyance of Her Majesty's mails until such defect or deficiency shall have been repaired or supplied to the satisfaction of the said Postmaster General.

6. Except as hereinafter provided, the rights and obligations of the Postmaster General and the said Company respectively, under the said articles of agreement of the 16th day of April 1861, shall henceforth be the same in all respects as if the provisions thereof hereinbefore set forth, and numbered 1 to 3 inclusive, were omitted therefrom.

7. Her Majesty's Postmaster General hereby releases the said Company from the obligation of those parts of the said articles of agreement of the 17th day of November 1865, which provide,—

(1.) That the vessels, engines, equipments, officers, engineers, and crew shall be subject, in the first instance, and from time to time, and at all times afterwards, to the approval of the Postmaster General, or of such other person or persons as he shall at any time or times authorise to inspect and examine the same.

(2.) That the Company shall (if required by the Postmaster General) submit the designs, plans, and sections of every vessel intended to be employed in the performance of the said agreement to the Postmaster General, and be bound to adopt such fittings and scantlings as he or the Lords Commissioners for executing the office of Lord High Admiral of the United Kingdom of Great Britain and Ireland shall consider suitable and requisite, and that no vessel shall be employed under the said agreement until it and its machinery shall have been previously tried underweigh and finally approved as aforesaid.

(3.) That the Postmaster General shall have full power, whenever and as often as he may deem it requisite, to survey, by any of his officers or agents, all or any of the vessels employed and to be employed in the performance of the said agreement, and the hulls thereof, and the engines, machinery, furniture, tackle, apparel, stores, equipments, and the officers, engineers, and crew of every such vessel; and any defect or deficiency that may be discovered on any such survey shall be forthwith repaired or supplied by the Company, and that for the purposes aforesaid the said vessels shall, if necessary, be opened in their hulls whenever the said officers may require; and if any of such vessels, or any part thereof, or any engines, machinery, furniture, tackle, apparel, boats, stores, or equipments, shall on any such survey be declared by any of such officers or agents unseaworthy, or not adapted to the service thereby agreed to be performed, every vessel which shall be disapproved of, or in which such deficiency or defect shall appear, shall be deemed inefficient for any service thereby agreed to be performed, and shall not be again employed in the conveyance of mails until such defect or deficiency has been repaired or supplied to the satisfaction of the Postmaster General.

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8. Except as hereinafter provided, the rights and obligations of the Postmaster General and the said Company respectively, under the said articles of agreement of the 17th day of November 1865, shall henceforth be the same in all respects as if the provisions hereinbefore set forth, and numbered 1 to 3 inclusive, were omitted therefrom.

9. If the said Company shall fail to deliver Her Majesty's mails at any port at which the same ought to be delivered in pursuance of any of the two firstly hereinbefore-recited contracts for 24 hours or more after the time at which the same ought to be delivered according to the provisions of such contract which shall for the time being be in force, the time, exclusive of stoppages in respect of both the said contracts until further altered as in the said contracts respectively provided, to be that hereinafter specified and shown, so far as regards the several ports hereinafter named; that is to say, between Southampton and Alexandria 310 hours, between Marseilles and Alexandria 155 hours, between Suez and Calcutta 499 hours, between Sandheads and Suez 488 hours, between Bombay and Hong Kong 413 hours, between Hong Kong and Shanghai 84 hours, and between Suez and Bombay 312 hours, from the expiration of which several periods of hours respectively the said period of 24 hours shall in each case commence, then and in every such case the said Company shall forfeit and pay to Her Majesty, Her heirs and successors, the sum of 50 *l.* for every complete period of 24 hours during which the delivery of such mails shall be delayed beyond the time at which the same ought to be delivered as aforesaid; provided always, that the payment of any such penalty as aforesaid shall not be enforced against the said Company if it be shown by them to the satisfaction of the Postmaster General that the delay has arisen from causes over which they the said Company had not and could not have had any control.

10. If the said Company shall deliver Her Majesty's mails at any port at which the same ought to be delivered in pursuance of any of the hereinbefore-recited contracts 24 hours or more before the time at which the Company is bound to deliver the same according to the provisions of such contract which shall for the time being be in force, such time to be at present as in the last preceding paragraph provided, then and in every such case Her Majesty's Postmaster General shall pay to the said Company a premium of 25 *l.* for every complete period of 24 hours by which the delivery of such mails shall have been accelerated as aforesaid.

11. Provided always, and it is hereby declared, that the extra time allowed in any of the hereinbefore-recited contracts during the seasons of the south-west and north-east monsoons shall be taken into account in all questions relating to penalties, but shall not be taken into account in any question relating to premiums.

12. If Her Majesty's Postmaster General shall consider any of the Company's vessels unfit for the conveyance of mails in pursuance of any of the hereinbefore-recited contracts, he may, by writing under his hand, or under the hand of the secretary, or of any of his assistant secretaries for the time being, require the said Company to show cause why such vessel should not be withdrawn from the aforesaid service; and unless within six weeks after such requisition the said Company shall show cause to the contrary to the satisfaction of the said Postmaster General, he may at any time after the expiration of the said period of six weeks, by writing under his hand, or under the hand of his secretary, or of any of his assistant secretaries for the time being, declare such vessel to be unfit for the conveyance of mails; and after such declaration shall have been made it shall not be lawful for the said Company to employ such vessel in the performance of any of the hereinbefore-recited contracts. And, in order to determine whether the said Postmaster General shall be justified in declaring any vessel unfit for the conveyance of mails, or whether the said Company shall be able to show cause to the contrary, a special examination shall be made of the hull and machinery of any such vessel by such person or persons as may be selected for that purpose by the Postmaster General.

13. The equipments, officers, engineers, and crew of each vessel, when such vessel is in any British port, shall continue to be subject at all times to the inspection of the said Postmaster General, or of such other person or persons as he shall at any time or times authorise to make such inspection.

14. The following annual sums shall, as from the date of these presents, be deducted and retained by the Postmaster General from the annual sums payable to the said Company under the hereinbefore-recited contracts respectively; (that is to say),—

An annual sum after the rate of 4,500 *l.* per annum (in addition to the annual sum of 15,000 *l.* deducted by virtue of the said agreement of the 1st day of June 1861) from and out of the aggregate of the annual sums payable to the said Company under the said contracts of the 1st day of January 1853 and the 7th day of July 1854.

An annual sum after the rate of 500 *l.* per annum from and out of the annual sum payable to the said Company under the said contract of the 16th day of April 1861, or from and out of the annual sum payable to the said Company under the said contract of the 17th day of November 1865.

15. Nothing herein contained shall exempt the vessels of the Company from liability to be surveyed by or on behalf of the Board of Trade with reference to the accommodation for passengers or otherwise.

16. All

16. All and singular the provisions and stipulations of the hereinbefore-recited contracts, and each of them, are hereby confirmed, except so far as the same are hereby discharged or modified.

In witness whereof the said Edward John Lord Stanley of Alderley, Her Majesty's Postmaster General, hath hereunto set his hand and seal, and the Peninsular and Oriental Steam Navigation Company have caused their common seal to be hereunto affixed the day and year first above written.

Signed, sealed, and delivered by the within named
Edward John Lord Stanley of Alderley, Her
Majesty's Postmaster General, in the presence
of

J. L. Du Plat Taylor,
Private Secretary,
General Post Office.

Stanley (L.S.) of Alderley.



Sealed pursuant to an order of the Board of Directors, in conformity with the provisions of the Deed of Settlement, in the presence of

C. W. Howell,
Secretary.

Z. Brooke,
General Post Office.

W. H. Hall,
Alexander Nairne,
W. Fane De Salis, } Directors.

— No. 9. —

COPIES of CORRESPONDENCE relative to the proposed WEEKLY MAIL between the United Kingdom and Bombay.

No. 1.

Mr. *Melwill* to the Secretary to the Post Office.

Sir,

India Office, 26 October 1860.

By direction of the Secretary of State for India in Council, I forward to you, for the consideration of Her Majesty's Postmaster General, the accompanying copy of a letter from the Government of India, together with a communication from the Director General of the Post Office of India, proposing a modification in the existing arrangements with the Peninsular and Oriental Steam Company for the conveyance of the mails between England and India.

Sir Charles Wood concurs in the opinion of the Government of India, that it is highly desirable to provide, as soon as possible, for the establishment of weekly postal communication between England and Bombay, and he hopes that Lord Stanley of Alderley will likewise make a favourable view of the proposed arrangement, and in his communications with the Lords Commissioners of the Admiralty, preparatory to the conclusion of the new contract with the Peninsular and Oriental Company, will give his support to the suggestion.

With regard to the subsidiary arrangements suggested by Mr. Riddell, Sir Charles Wood suspends his opinion till he shall receive the further communication promised by the Government of India, when they shall have been made acquainted with the sentiments of the several Chambers of Commerce in India.

The Secretary, Post Office.

I am, &c.
(signed) *J. Cosmo Melwill.*

Enclosure 1, in No. 1.

HOME DEPARTMENT.

Post Office.—No. 16 of 1860, August 31st.

To The Right Honourable Sir *Charles Wood*, Bart., G. C. B., Secretary of State for India.

Sir,

WE have the honour to transmit the accompanying copy of a letter from the Director General of the Post Office of India, drawing attention to the expediency of an alteration in the existing arrangements with the Peninsular and Oriental Company for the conveyance of the mails between England and India.

2. The present arrangement, under which four mails are despatched monthly from England to India, viz., two to Bombay and two to Calcutta, cannot be considered satisfactory.

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factory, as you will perceive from paragraphs two to six of the Director General's letter. Under it Mr. Riddell observes, "a very small portion of India derives any benefit from the two mails which are sent direct to Calcutta, and even Madras and Calcutta would receive their mails earlier than they now do, if they received them *viâ* Bombay instead of by sea." Mr. Riddell, therefore, strongly advocates the entire abandonment of the route *viâ* Galle, and the despatch from London, on a fixed day in each week, of a mail to Bombay for the whole of India.

3. In forwarding the Director General's letter for the consideration of Her Majesty's Government, we beg to express our concurrence in his views of the expediency of providing as soon as possible for a weekly postal communication with Bombay, whereby the whole of India would receive letters by every mail. At present only a very small part of India has the benefit of four mails in the month; the whole of the North-western Provinces, the Punjab, Scinde, and Bombay, and a great portion of the Madras Presidency receiving no benefit whatever from the two mails which are sent *viâ* Galle.

4. It is our intention to invite a communication of the views of the several Chambers of Commerce in India upon this subject, but we think it desirable not to delay the transmission to you of Mr. Riddell's report.

5. Referring to the correspondence noted on the margin, we would add that in case at any time the Government should be in a position to authorise the additional expense of a direct communication between Aden and Kurrachee, which no doubt would be a great advantage to Scinde and the Punjab, it seems desirable that any new contract for the conveyance of the Indian mails should include an arrangement for running a small steamer between Kurrachee and Aden (both ways) twice a month, to be carried into effect by the contractors at any period during the contract on receiving a certain notice from the Government to do so.

We have, &c.
(signed) Canning
H. B. E. Frère.
Cecil Beadon.

Fort William, 31 August 1860.

Enclosure 2, in No. 1.

From H. B. Riddell, Esq., Director General of the Post Office of India, to W. Grey, Esq., Secretary to the Government of India (No. 2668); dated the 24th April 1860.

As the mail contract with the Peninsular and Oriental Company for the conveyance of the mails between Great Britain and India will expire next year, I desire to draw the attention of the Government of India to the subject, in the hope that an alteration may be made in the existing arrangements, which, besides being unnecessarily expensive, do not afford satisfactory accommodation to the public.

2. At present four mails are despatched from England and from India every month; two from and to Bombay, and two from and to Calcutta. According to the time table, 35 days are occupied between London and Calcutta *viâ* Marseilles, 24 days between London and Bombay. The mail of the 10th January should reach Calcutta on the 13th February, while that of the 18th January should reach Bombay on the 10th February. It is clear that all places within three days post of Bombay would receive the mail of the 18th January *viâ* Bombay before the mail of the 10th reached Calcutta. At a place situated as Benares, the mail of the 10th January *viâ* Calcutta would be delivered on the morning of the 16th February; a mail of the same date, if sent *viâ* Bombay, would reach Bombay on the 2d February, and be delivered at Benares on the 7th or 8th February. The mail which left London on the 18th January *viâ* Bombay, would be delivered at Benares on the 15th or 16th February at the same time, or before the mail of the 10th January arrived *viâ* Calcutta. Benares is about 1,000 miles from Bombay, and 422 miles from Calcutta.

3. As I have stated in the preceding paragraph, the mail which left London on the 10th January is due at Calcutta on the 13th February; if it were sent *viâ* Bombay, it would be due at Bombay on the 2d February; and according to present rates of speed, and even with existing means of transport, the letters would all be delivered in Calcutta on the 9th or 10th, and all Southampton newspapers by the 12th or 13th. I shall explain below, that the period required for land transit will be very materially reduced by the end of next year.

4. The case as regards Madras is similar. The mail leaving London on the 10th January is due at Madras *viâ* Galle on the 9th February; if sent by Bombay, it would be due on the 6th February, having reached Bombay on the 2d idem.

5. It is, I think, clear from the above statement, first, that under the existing arrangement a very small portion of India derives any benefit from the two mails which are sent direct to Calcutta; and, secondly, that even Madras and Calcutta would receive their mails earlier than they now do if they received them *viâ* Bombay instead of by sea.

6. I would, therefore, strongly advocate the entire abandonment of the sea route to Calcutta, and the despatch from London on a fixed day, say Wednesday in each week, of a mail to Bombay for the whole of India. If this measure be carried out, the whole of India will receive the benefit of a weekly mail; at present, a very insignificant portion derives any advantage from it. A saving can be made in the annual subsidy to the extent of the sum paid for 61,904 miles, the difference between the distance travelled in a year by the
Post

Post Office steamers by the existing route and that which would be travelled were Bombay made, as it ought to be, the postal port for all India.

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7. I give in margin the distances between the chief ports between Suez and India. It will be seen that Aden is 1,775 miles nearer to Bombay than to Calcutta. The mileage saved on 24 voyages will, therefore, be 85,680 miles. This will, however, be reduced by the four extra mails, which, if my proposal is carried out, will be despatched from London and from Bombay; the distance from Suez to Bombay being 2,972 miles. The distance traversed in eight voyages (four in each direction) will be 23,776, which, deducted from 85,680, gives a net saving, east of Suez, of 61,904 miles.

Suez to Aden	-	-	1,308	
Aden to Galle	-	-	2,134	
Galle to Madras	-	-	545	3,449
Madras to Calcutta	-	-	770	
Aden to Bombay	-	-	1,684	

8. A considerable additional saving might also, as it appears to me, be made on the portion of the line between Alexandria and Southampton. There are now four mails despatched and received every month *viâ* Southampton. If there were really a weekly mail for the whole of India, I do not see any reason why more than one mail should be despatched *viâ* Southampton in each month. The difference of charge is 1 *d.* on each newspaper, and 3 *d.* on each letter; but the Southampton mail must always be rather more than a week longer in transit than the mail sent *viâ* Marseilles. The chief difficulty which prevents the adoption of the Marseilles route is the charge on soldiers' letters, which is only 1 *d.* for half-an-ounce. The present French charge is 6 *d.* for half-an-ounce, but I have little doubt that the French Post Office would consent to a reduction in the charge in the case of soldiers' letters, and I believe that it would be much cheaper to pay the French transit charge on soldiers' letters than to pay the cost of two extra steamers a month for the purpose of conveying them across the Bay of Biscay and round Spain.

9. I would also suggest, that it is probable that if all letters and newspapers were sent *viâ* Marseilles, the French Post Office might consent to take a smaller sum than they now require on each letter, and that an uniform rate of 6 *d.* per quarter-ounce divided, as shown in margin, would be as profitable to the Post Office as the higher charge which now varies by half-ounces for English postage and quarter-ounces for French postage.

England	-	-	-	1 penny.
France	-	-	-	1 "
Sea, and Egypt	-	-	-	3 pence.
India	-	-	-	1 penny.
				6 pence.

10. If the French Post Office will not reduce their charge, and if we are not bound by convention for a term of years to adopt the Marseilles route, the advantages of the Trieste route should be considered. If the direct railway between Vienna and Munich is open, I have little doubt that it would be found the shortest in point of time.

11. If, however, the changes suggested above cannot be carried out, there will, at all events, be no reason to despatch more than two Southampton mails in the month, as no one receives at the present time more than two Southampton mails in a month.

12. In discussing the advantages of a weekly mail to Bombay, and the abandonment of the Calcutta route, I have put aside all consideration of the accommodation to passengers which is afforded by the mail steamers which now ply between Calcutta and Suez. The Government may consider it proper to pay a subsidy to a company, in order to receive the advantage of large and fast passenger steamers to Calcutta, but there can be no doubt that if it is not necessary for postal purposes to subsidize steamers on that route, it is not proper to charge the postal revenues of England and India with the amount of the subsidy.

13. There can be no question that when Calcutta and Bombay and Madras are united by railway, as they will be in the course of the next three years, Bombay will be the port at which the English mails must be landed. By the end of next year the railway will have advanced considerably in both directions; but even now I will undertake that the mails shall be conveyed across India weekly for an increase of expenditure very much below the sum which will be saved.

14. Before concluding I must notice the rate at which, according to the official time table, the contract steamers are expected to travel. The contract rate is fixed at 10 knots an hour; at that rate, allowing 24 hours at Aden, the time occupied between Suez and Bombay should be 13 days 10 hours. The time occupied between London and Bombay ought not to exceed 20 days.

15. I will now recapitulate the proposals made above, and some of the advantages which I believe will result if they are adopted; first, I recommend that the Calcutta and Madras mails be sent *viâ* Bombay; secondly, that a mail leave London and Bombay on a fixed day in each week, *i. e.* 52 mails a-year; thirdly, that the subsidy now paid by the Government of India for the conveyance of mails between Aden and Calcutta should be entirely saved. If this were done, all India would receive the advantage of a weekly mail, which is now confined to a very small portion of the continent. The cost of two extra Southampton mails will be saved. The distance from Suez to Bombay being comparatively trifling, the Government need not be at the mercy of the great company which now monopolises the steam commerce east of Suez.

16. In conclusion, I will only add that I am ignorant of the sum now paid from the revenues of India for the Overland mail, and I shall be obliged if you can furnish me with copies of any agreement which has been made on the subject with the English Treasury. If the suggestions which are made above are adopted, the line specially subsidized for India will be that from Aden to Bombay. Australia, China, Ceylon, and Mauritius should pay a large share of the cost of the lines between Suez and Marseilles.

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No. 2.

Mr. *F. Hill* to Mr. *Melville*.

(1,272. L.)

Sir,

General Post Office, 15 November 1860.

I HAVE laid before the Postmaster General your letter of the 26th ultimo, transmitting the copy of a letter from the Government of India, together with copy of a communication from the Director General of the Post Office of India, proposing a modification in the existing arrangements for the conveyance of the mails between this country and India, and I am directed by his Lordship to acquaint you, for the information of Sir Charles Wood, that he will take measures for ascertaining what would be the expense of establishing a weekly mail with India, to and from the port of Bombay; but that, notwithstanding the shorter distance which would have to be travelled by sea, he much doubts whether, instead of any saving of expenditure being effected by sending the mails wholly by way of Bombay, the alteration would not give rise to an increased charge, seeing that the greater number of passengers and the bulk of the goods traffic being for Calcutta, the contractors can afford to convey the mails by way of that port at a lower rate of charge than they could if they had only the Government subsidy to look to as a remuneration.

I am, &c.
(signed) *F. Hill*.

No. 3.

Mr. *Bayley* to Mr. *F. Hill*.

Peninsular and Oriental Steam Navigation Company,
Offices, 122, Leadenhall-street, London, E.C.,
6 December 1860.

Sir,

THE copy of a letter addressed to the Government of India by Mr. H. B. Riddell, Director General of the India Post Office, having been forwarded to the managing directors of the Company, it was referred by them to Mr. John Ritchie, the Company's superintendent at Bombay, at present in London, for such information as he might be able to furnish in respect to the changes in the postal service therein proposed.

Mr. Ritchie having resided in India 12 years, and possessing considerable knowledge of the postal arrangements of that country, the managing directors have considered that the statements contained in his letter to them might be of some value to you, and they therefore beg to transmit a copy of it.

Frederic Hill, Esq., &c., &c.,
General Post Office.

I have, &c.
(signed) *H. Bayley*,
For the Managing Directors.

Enclosure 1, in No. 3.

The Managing Directors, Peninsular and Oriental Steam Navigation Company, London.

Peninsular and Oriental Steam Navigation Company,
Offices, 122, Leadenhall-street, London, E.C.,
7 December 1860.

Gentlemen,

AGREEABLY to your instructions I beg to report that I have examined the suggestions contained in a letter from Mr. H. B. Riddell, dated 24th April last, addressed to the Government of India, recommending certain alterations in the existing arrangements for carrying on the mail service between Great Britain and India on the expiry of this company's contracts next year. These suggestions, if carried out, would amount to a complete re-organization of the company's mail service and affect large and important interests which he has either overlooked or did not consider it necessary to take into account; and as they have received the qualified approval of the Governor General in Council, it is advisable to examine them in detail to show the inaccuracies which they involve.

In dealing with the question Mr. Riddell has committed the common mistake of examining it from a narrow and local point of view, and as only affecting the community in which he lives. He has not considered the large scheme of postal communication as a whole, which, in working out, is necessarily imperfect in some details that cannot be adjusted without deranging the whole plan; neither has he taken into account the interests of the great English public, the party most deeply affected, and which contributes the largest portion of the subsidies, or those of the English dependencies in the Straits, China, and Australia.

To place the modification which he proposes in a clear form I would direct attention to the annexed tables:

1st. The present scheme, showing the time of arrival and despatch of mails from Calcutta and Madras.

2d. *Pro formâ* table of a weekly mail service, showing the probable working of Mr. Riddell's plan, if carried into operation.

III

By

By the latter plan the sea-borne mail service begins and ends with Bombay. The estimated difference in distance between it and the present scheme on the Indian side, as stated by Mr. Riddell, 61,904 miles, may be taken as correct; he has, however, omitted to take into consideration the following circumstances:

1st. The extra distance that would be run by the steamers from Bombay to Aden during the monsoon months, amounting to about 4,000 miles.

2nd. That a weekly communication would necessitate four additional voyages between Alexandria and Marseilles, not included, the distance being 11,824 miles.

These are minor considerations; there are others of much greater weight:

1st. Mr. Riddle overlooks altogether that no steam company would contract for the performance of a weekly mail service between Suez and Bombay at the mileage rate at which the present Calcutta mails are carried.

The present half monthly communication with Bombay is amply sufficient for the transport of all goods and passengers to and from that port. A weekly line would require the employment of three more running steamers, and as this would lead to no increase in the commercial revenue, and the service would be purely postal, the whole expense would have to be borne by Government.

The working expense of 28 additional voyages between Suez and Bombay, with three vessels of about 1,400 tons each, would be about 120,000 *l*.

2nd. Mr. Riddell omits to make any provision for the China, Straits, and Australian mails which have to be placed at Galle, and which, *pro ratâ*, contribute to the expense of carriage from thence to and from England.

3rd. As far, therefore, as the Madras and Calcutta mail service is concerned, the only mileage distance in question is that between Galle and Calcutta, about 63,120 miles, the mail subsidy for which amounts to 17,358 *l*.

It remains to be considered whether, for such a trifling economy as this, it would be worth while to deprive Madras and Calcutta of the advantages of frequent and regular communication by the large steamers of an intermediate mail service, and of the direct mail service with Australia and China, advantages of some importance when the great and growing trade with these countries is taken into account.

On this point the mercantile communities of the two Presidencies, who are better judges than Mr. Riddell of what they want, are, I am certain, at variance with him.

4th. So far, therefore, as the relative economy of the two schemes is considered, the result stands as follows:

By his plan the mail contract would stop short at Galle, against the wishes of the Madras and Calcutta communities, reducing the mileage by 63,120 miles, at 5 *s*. 6 *d*., 17,358 *l*.

Against which must be placed—

1st. Additional mail service from Bombay to Suez, 28	£.	<i>s</i> .	<i>d</i> .
voyages - - - - -	120,000	-	-
2nd. Four additional voyages between Marseilles and			
Alexandria, 11,824 miles, at 5 <i>s</i> . 6 <i>d</i> .	-	3,251	12 -
3rd. Additional expense of transport of mails across India, and increase of			
Bombay Post Office Establishment.			

It is not intended to deny that the present mail scheme is incapable of improvement, but Mr. Riddell's jealousy of the "great Company which now monopolizes steam communication east of Suez," hinders him from suggesting the easiest and most economical remedy for existing evils, &c.

The establishment of a branch mail line between Bombay and Aden, in connection with the Calcutta service. This would supply nearly all that he wants, and at a cost to the Government considerably less than by the plans he proposes, while it would meet the general approval of the Indian public.

The Company have already suggested this line, but as it would add nothing to the revenue for freight and passengers, and would be purely a mail service, the subsidy should not be less than 50,000 *l*.

I now proceed to examine the advantages which Mr. Riddell supposes will be secured to India by more speedy and regular transmission of mails overland to and from Bombay.

I note, firstly, that he states the time for conveyance by dāk to Madras from Bombay as four days. I am almost certain that this is a mistake; the ordinary course of post when I left India being six to seven days.

2nd. That the letter mail to Calcutta would take by the existing means of transports even to eight days, and all Southampton newspapers 10 to 11 days. This discrepancy in time may seem a slight matter, but I know that the irregular and desultory delivery of newspapers would be felt as a serious evil by residents in India. I ask what any man in England would say if he received the "Times" of 5th, 1st, 4th, 2d, 6th, 3d, and 7th, without regard to sequence, and by mails extending over four or five days.

I am satisfied, moreover, that it can be shown that the available means of the India Post Office are not equal at present to the work which Mr. Riddell proposes to throw upon it, an opinion in which Captain Tronson, our superintendent in Calcutta, concurs, and which I know was held when I left India by the Postmaster General of Bombay.

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Even with the present comparatively unimportant overland mail, constant complaints appear in the Calcutta journals of the irregularity of its arrival there. An imperfect estimate of the difficulties may be formed from the following statement :

The present average of a Bombay mail is about 90 boxes and packages, weighing three and a half tons, and the Calcutta and Madras mail consists of about the same number of packages.

We may fairly assume, therefore, that the weekly mail landed at Bombay for Calcutta, Madras, and Central India, would amount to about 100 to 120 packages, weighing about five tons.

The distance between Bombay and Calcutta by the railway route *viâ* Benares is about 1,420 miles, and of this there is not more than 420 miles complete; the remainder of the distance, say 1,000 miles, must be performed by mail cart and horse and coolie dâk.

Now, to insure the simultaneous conveyance of this enormous mail across country to Madras and Calcutta, is not only, I feel convinced, beyond the resources of the Post Office, but, I believe, almost beyond the ability of Government, leaving out of account the unavoidable delays and damage to mail packages that occur in the rainy season.

In addition, to secure dispatch from Bombay, the post-office there must be greatly strengthened and extended, as it is already unable to meet the work which falls upon it.

It is true that as the railways extend the facilities of overland transit will increase, but we cannot look to the completion of the communication throughout for the next five years, as large portions of the proposed lines are at present untouched.

Since writing the above, I have received copy of a letter from the Chairman of the Chamber of Commerce at Madras, containing the views of the mercantile community of that place, and which coincide with the conclusion I have recorded above :

1st. That in the present incomplete state of the railways, it would be very objectionable to relinquish the sea-borne mail service.

2d. That the Indian Post Office Department is altogether incompetent to perform the work which Mr. Riddell's plans would impose upon it.

I annex a copy of the letter, and I understand that similar opinions have been expressed at Calcutta.

I am, &c.
(signed) *John Ritchie.*

Enclosure 2, in No. 3.

James Allan, Esq., Managing Director Peninsular and Oriental Steam Navigation Company, London.

Chamber of Commerce, Madras,
4 October 1860.

Sir,

I HAVE the honour to enclose copies of letters from the Government of India to this Chamber, and of my reply thereto, relative to the future conveyance of the overland mails, and to request that you will move the directors of your Company to keep in consideration the interests of the public of the eastern side of India, in any negotiations which they may have to make to Government at the conclusion of the present contract.

I have, &c.
(signed) *H. Nelson, Chairman.*

Enclosure 3, in No. 3.

(No. 1858.)

From *W. Grey, Esq.,* Secretary to the Government of India, to the Secretary of the Madras Chamber of Commerce.

Sir,

Fort William, 3 September 1860.

WITH reference to the accompanying copy of a letter from the Director General of the Post Office, No. 2668, dated the 24th April last, I am directed by the Governor General in Council to request the Chamber of Commerce will be so good as to communicate to that officer any suggestions for the improvement of the overland mail service which it may appear to the Chamber desirable to adopt.

The Governor General in Council, I am to add, has transmitted a copy of Mr. Riddell's letter to Her Majesty's Government, with a general recommendation that steps should be taken to provide as soon as possible for four mails in the month to Bombay, in order that the whole of India may benefit by more frequent communication.

Mr. Riddell will be desired to report further to Government after being made acquainted with the views of the Chambers at the three Presidencies.

I have, &c.
(signed) *W. Grey,*
Secretary to the Government of India.

Enclosure 4, in No. 3.

App. No. 1.

H. B. Riddell, Esq., Director General of the Post Office of India.

Chamber of Commerce, Madras,

27 September 1860.

Sir,

WITH reference to a communication from the Government of India, dated 3rd instant, I am desired by the Chamber of Commerce to convey to you the opinion of its members relative to your letter to Government, No. 2668, dated 24th April 1860, a copy of which was enclosed.

In this letter you advocate certain organic changes in the mode of conveying the overland mails to and from England, which changes you consider should be carried out in next year, when the existing contract with the Peninsular and Oriental Steam Navigation Company will expire.

You propose, firstly, that the Calcutta and Madras mails be sent *viâ* Bombay; secondly, that a mail leave London and Bombay on a fixed day in each week; thirdly, that the subsidy now paid by the Government of India for the conveyance of the mails between Aden and Calcutta be entirely saved.

These proposals involve the abolition of the direct steamer mails to the eastern coast of India; a radical change, which can only be justified by the substitution of some arrangement possessing very decided advantages as to speed in transit and certainty of arrival and delivery. It is admitted that the direct steamer mails may occupy on the voyage, as shown by you, two or three days more than the letter mail by the Bombay route (the saving however as to newspapers being next to nothing); but, in exchange for this delay, there exists a very tolerable assurance of punctual arrival, and also the advantage of the mail being delivered all at one time.

When the railway communication between Bombay and Madras, and Bombay and Calcutta, is completed, some such changes as those now proposed are inevitable; and keeping in view the termination of the contract of the Peninsular and Oriental Company in next year, it is incumbent with Government so to shape its next arrangements as to meet the necessities of the future. The Chamber, therefore, desires to express its satisfaction that you have thus early set the question in motion, with a view to its being thoroughly examined in the interim.

Until this railway communication between the Presidencies is perfected, it appears to the Chamber that the proposed changes will be of doubtful value to all the eastern ports of India, and especially to the capital cities of Calcutta and Madras, with their adjacent districts. The new system would involve a weekly mail, analogous to the "mail *viâ* Bombay" as now existing, but in an exaggerated form, with all its present evils very much aggravated. The "mail *viâ* Bombay," is carried overland in India partly by rail and partly by mail cart or foot runners.

It arrives in Madras by instalments, after an uncertain period of transit. Some letters, and a very few newspapers, come on the first day, and other letters and more newspapers on the second. The mails in certain seasons arrive much damaged by rain. This state of things is very annoying and harassing to the public. No person, especially if he be in business, likes an uncertainty as to whether or not all his letters or only a portion of them have come to hand, and frequently valuable time is wasted from the hope that an "expected letter may yet come to-morrow."

If this undesirable state of things be in existence (and perhaps necessarily so) with a light mail, such as we have *viâ* Bombay, we may infer that it will be greatly aggravated were all European correspondence diverted into the same route. The direct steamers bring for this city 10 or perhaps 20 times the number of letters brought by the Bombay mail; in fact, the latter is comparatively little used. The question then naturally arises how these heavy mails are to be carried, and over how many days the delivery will have to be spread.

If it be said that the post office contemplates a large addition to the present establishment of mail carts and runners to meet this exigency, I am desired to say that, in the opinion of the Chamber, such an increase as will entirely obviate these objections, is next to impossible. Further, admitting the possibility, it is not supposed, judging by past experience, that the public will place much confidence in any promises of such increase to be made now by the post office authorities.

The present service by mail carts and runners is probably as bad as it can be, and there is no fair prospect that it will be so improved, and its resources so much developed, as to render it equal to the immensely increased duty which these proposed changes would burden it with. And the Chamber cannot avoid observing that your letter under consideration merely states (paragraph 13), that you will undertake that the mails shall be conveyed across India weekly for an increase of expenditure very much below the sum which will be saved, while you make no special reference to increased establishments, either of carts or runners, to the average speed at which the letters shall be conveyed, or to the important point of simultaneous delivery.

From these considerations the Chamber has arrived at the conclusion that until railway communication be complete across India, from Bombay to Calcutta and Madras respectively, it will be more for the interests of the public, and especially of that portion of it on this side of India, to maintain the present line of steamers from Aden to Calcutta.

It is observed that the Governor General in Council has, in transmitting your letter, recommended the provision of four mails monthly to Bombay; but as this is evidently

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intended to be concurrent with the maintenance of the mail steamers to Calcutta, it does not affect the question immediately before us, and only demands the thanks of the public as leading to increased mail communication. A plan embracing a weekly mail from Marseilles to Aden, with steamers leaving that port for Bombay and Calcutta, on the arrival of each mail, is one which would be hailed as a great improvement on the present service.

In this letter it has not been thought expedient to touch on the subject of passengers, cargo, and parcels, brought by the direct steamers, but it is evident that the interests of the public in this part of the question is very great, and that Government, when dealing with the subject, will not be able to ignore it, and to treat the matter exclusively as a Post Office question. I may, however, mention, that the abolition of the direct mail would cause a great number of parcels containing samples and light miscellaneous articles to be sent through the Post Office, thus rather largely increasing the difficulty of land transit before referred to.

I have, &c.
(signed) *H. Nelson*, Chairman.

Enclosure 5, in No. 3.

Present working of India Mail Service.					Proposed Scheme of Mr. Riddell.				
OUTWARDS.					OUTWARDS.				
Leave London, <i>viâ</i> Marseilles.	Arrive at Bombay.	Arrive at Madras.	Arrive at Calcutta.	ROUTE.	Leave London <i>viâ</i> Marseilles.	Arrive at Bombay.	Arrive at Madras.	Arrive at Calcutta.	
10 January -	- -	9 February	13 February	<i>viâ</i> Galle.	Wednesday, 4 January -	28 January	3 February	5 February	
18 " -	10 February	17 " -	18 " -	by dâk from Bombay.	" 11 " -	6 February	10 " -	12 "	
26 " -	- -	25 " -	29 " -	<i>viâ</i> Galle.	" 18 " -	13 " -	18 " -	20 "	
3 February	26 February	4 March -	6 March -	by dâk from Bombay.	" 25 " -	20 " -	25 " -	27 "	
					" 1 February	25 " -	1 March -	3 March.	
HOMEWARDS.					HOMEWARDS.				
Leave Calcutta.	Leave Madras.	Leave Bombay.	Arrive in London by Marseilles.	ROUTE.	Leave Calcutta <i>viâ</i> Bombay.	Leave Madras <i>viâ</i> Bombay.	Leave Bombay.	Arrive in London <i>viâ</i> Marseilles.	
10 February	13 February	- -	14 March -	<i>viâ</i> Galle.	By Dâk:				
17 " -	18 " -	25 February	19 " -	by dâk to Bombay.	Wednesday, 8 February	10 February	16 February	11 March.	
24 " -	27 " -	- -	28 " -	<i>viâ</i> Galle.	" 15 " -	17 " -	22 " -	17 "	
4 March -	5 March -	12 March -	4 April -	by dâk to Bombay.	" 22 " -	24 " -	29 " -	24 "	
					" 29 " -	2 March -	7 March -	31 "	
					" 7 March -	9 " -	14 " -	8 April.	

No. 4.

Mr. Hill to Mr. Melvill.

Sir,

General Post Office, 18 December 1860.

WITH reference to your letter of the 26th October last, and its enclosures, from the Government of India, and the Director General of the Indian Post Office, pointing out the advantage that would be derived from the transmission of the Indian mails wholly by the route of Bombay, I am directed by the Postmaster General to request that you will lay before the Secretary of State for India in Council, the accompanying copy of a letter* from the Peninsular and Oriental Steam Navigation Company, covering copy of a letter from the Company's agent at Bombay, in which he calls attention to obvious objections to the proposed alterations, and I am to suggest that these papers should be forwarded to the Government of India for its consideration.

J. C. Melvill, Esq., India Office.

I am, &c.
(signed) *F. Hill*.

* See Letter No 3, and Enclosures.

No. 5.

Mr. *Merivale* to the Secretary to the Post Office.

Sir,

India Office, S.W., 12 January 1861.

I AM directed by the Secretary of State for India in Council to transmit, for the consideration of Her Majesty's Postmaster General, a copy of a letter from the Government of Bombay, together with its enclosure, relating to a proposal for direct steam communication between Kurrachee and Suez.

2.

To the Secretary, Post Office.

I am, &c.
(signed) *Herman Merivale*.

Enclosure 1, in No. 5.

(No. 38 of 1860.—General Department.)

To the Right Honourable Sir *C. Wood*, Bart., M.P., Her Majesty's Principal Secretary of State for India.

Right Honourable Sir,

WE have the honour to transmit herewith a memorial from the Kurrachee Chamber of Commerce, addressed to Her Majesty's Postmaster General for England, praying for direct steam communication between Kurrachee and Suez.

2. The Commissioner in Sind, in submitting this memorial, has made the following representation :

"I would earnestly request your Excellency in Council to submit this memorial for the most favourable consideration of Her Majesty's Government; and I take this opportunity of representing the great advantages to be expected were Kurrachee made the point of arrival and departure for the extra mails which the Chamber of Commerce applies for; the greatest of these being its proximity to Aden and the Red Sea, and its telegraphic communication with all parts of India."

3. We are of opinion that, considering the trade in European merchandise is at present in its infancy at Kurrachee, and that it is inaccessible at high tide to vessels drawing more than 17 feet of water, it would be premature to carry out at any considerable charge on the Government Treasury a direct line of communication by steamer between Suez and the Red Sea, for Europe. But there can be no doubt that, if the importance of running first-class steamers to this Presidency on the west coast is so far acknowledged in any new contract as to provide for a weekly communication with all India by this obvious Bombay course, it would greatly aid and encourage our settlement at Kurrachee in Sind, if the contract were to be so determined that, twice a month, either the large steamers should extend their voyage to and from Kurrachee, or that taking this for their port of arrival and departure, a line of suitable coast steamers of sufficient power should run in correspondence as mail and passenger steamers between this port and Kurrachee.

We have, &c.

Bombay Castle, 27 October 1860.

Enclosure 2, in No. 5.

To the Postmaster General for England.

The Memorial of the Mercantile Firms composing the Chamber of Commerce in Kurrachee,

Respectfully sheweth,

THAT it has come to the knowledge of your memorialists that the term of the contract entered into by the British Government with the Peninsular and Oriental Steam Navigation Company for the conveyance of Her Majesty's Indian Mails will expire at the close of the present year.

That your memorialists therefore beg most respectfully to submit for your favourable consideration, pending a renewal of the contract with the same Company, or the entering into a fresh contract with any other Company, the growing importance of the port of Kurrachee, and the claims in political, military, and commercial points of view to be respected in any contemplated mail arrangements possessed by Sind and the provinces subject to the Punjab Government.

That in soliciting your attention to this matter your memorialists venture to lay before you a brief outline of the position of Kurrachee as a commercial port.

That Kurrachee may be defined as the gate of Central Asia. It is the most western port of India, and possesses the only land-locked harbour between Bombay and the Persian Gulf. Since the year 1844 its trade, which might then be represented as nil, has been rapidly and steadily increasing, until it may be now stated at little short of 3,000,000 sterling in value.

That it cannot be doubted that, on the expected completion by the end of the present year of the double line of railway now under construction, with the view to connect the port with the River Indus at Kotree, and of the powerful flotilla intended to ply between that

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point and Mooltan, a terminal station of the Punjab Railway, not only will the encouraging progress of the external trade of the port, indicated above, be maintained, but, and more especially if a more direct communication with Europe than at present exists can be secured, a most powerful impetus will be given to the trade in raw silk, shawls, precious stones, and other valuable commodities now springing up with Central Asia.

That travellers from the Punjab and Upper India to Europe, and *vice versa*, will also be encouraged to adopt this route in preference to the longer and more expensive one *via* Calcutta.

That at present mails and passengers from Europe, in transit to Sind and the provinces beyond it, are conveyed in the first instance to Bombay, where they are detained from 24 to 48 hours, and then sent forward to this port in inefficient steam vessels, which take from three to five days in making the passage, one of 490 miles only; and as these steamers obtain their port clearance prior to the arrival of mail packets from Suez, specie and goods destined for Kurrachee and its dependencies are in consequence delayed in Bombay until the next opportunity, which does not occur before the lapse of another fortnight. The delays thus occasioned cannot be otherwise than detrimental to the commercial and general interests of the provinces referred to.

That the positional advantages of Kurrachee for securing rapid telegraphic communication have been already recognised, in its having been selected as the terminal point of the submarine cable from Suez; and your memorialists would deferentially submit that the same considerations which operated in its being fixed upon for that purpose may, with equal force and justice, be admitted in any scheme having for its objects the more rapid transmission of mails and passengers for India.

That the relative distances between Kurrachee and Aden, and Bombay and Aden, are as follows, namely:

Kurrachee to Aden, direct	-	-	-	-	1,435 miles.
Bombay to Aden, direct, in fair season	-	-	-	-	1,648 "
Ditto - in south-west monsoon	-	-	-	-	2,170 "
Ditto - <i>via</i> Kurrachee	-	-	-	-	1,925 "

That it will thus be seen that, for four months in the year, the route to Bombay *via* Kurrachee would be shorter by 140 miles than the direct one now used, whilst during the other eight months the passage would be prolonged by only 277 miles, or 24 hours' fair steaming.

That under the above circumstances your memorialists would beg most respectfully to urge that, in any fresh contract entered into for the conveyance of Indian mails, provision be made for two steamers, in addition to the two already on the direct line, to run between Suez and Bombay, *via* Kurrachee. This arrangement would secure to Bombay four mails monthly; namely, two direct and two *via* Kurrachee, whilst it would give to Kurrachee a direct mail every fortnight.

That in behalf of the arrangements they have thus ventured to suggest, your memorialists would further press the claims of the large and important section of Her Majesty's subjects resident in the North-West Provinces, west of Agra, in the Punjab, and in Sind, who, if the proposed line of communication were adopted, would receive their letters from Europe four to six days earlier than they obtain them at present; and if, as your memorialists submit is not by any means improbable, the Red Sea Telegraphic Line should continue liable to interruptions, your memorialists are of opinion that the importance to the Government of India of the early receipt of intelligence from Europe, which the proposed arrangement would secure, can scarcely be overrated.

And your memorialists, as in duty bound, will ever pray.

Daniel McIver, Chairman,

For himself and the other Merchants composing
the Chamber of Commerce.

1 September 1860.

No. 6.

Mr. F. Hill to Mr. Merivale.

Sir,

General Post Office, 5 February 1861.

I HAVE laid before the Postmaster General your letter of the 12th ultimo, forwarding the copy of a letter from the Governor of Bombay, dated the 27th October 1860, together with a memorial from the Chamber of Commerce in Kurrachee, in which it is requested that, in any new arrangement of the mail services performed by the Peninsular and Oriental Steam Navigation Company, provision may be made for two steamers (in addition to the two already on the direct line) to run between Suez and Bombay *via* Kurrachee, thus securing four mails monthly to Bombay; viz., two direct and two *via* Kurrachee, and a direct mail to Kurrachee every fortnight.

The Postmaster General observes, that the Government of Bombay do not support the application of the Chamber of Commerce. They only state that, in the event of a weekly mail between England and India being established *via* Bombay, it would greatly aid and encourage the settlement at Kurrachee in Sind, if the contract were to be so framed that, twice a month, either the large steamers should extend their voyage to and from Kurrachee, or that, taking Bombay for their port of arrival and departure, a line of suitable coast steamers of sufficient power should run in correspondence, as mail and passenger steamers, between Bombay and Kurrachee.

As

As regards the proposal for a weekly service to Bombay, I am directed by his Lordship to refer you to a letter from this office, dated the 15th November last, and to another letter dated the 18th ultimo, in the latter of which was forwarded, with a suggestion that it should be referred for the consideration of the Government of India, the copy of a letter from the Peninsular and Oriental Company, covering a report from the Company's agent at Bombay, in which he pointed out several strong objections to such a measure.

But, even if the proposed alteration were adopted, the Postmaster General could not entertain any proposal for establishing, at the joint expense of India and of this country, a fortnightly communication by steam vessels between Bombay and Kurrachee, as he considers such a service, if required, should be supported at the sole expense of the Indian Government, and that this department, after providing jointly with India for the conveyance of the mails as far as Bombay, cannot properly be charged with any expense to be incurred in the after-conveyance of the letters, &c. to their destination.

While upon the subject, I am to observe that the memorialists appear to be under some misconception with regard to the termination of the contracts with the Peninsular and Oriental Company.

The fixed period for which those contracts were made expired in December last, but the services continue in force until either party to the contracts shall give 12 months' notice to the other of an intention to determine them.

I am, &c.
(signed) *F. Hill.*

Herman Merivale, Esq., C. B.,
India Office.

No. 7.

Mr. *Merivale* to the Secretary to the Post Office.

Sir,

India Office, S. W., 19 September 1861.

WITH reference to my letters to your address, dated 26th October 1860 and 12th January 1861, on the subject of the establishment of a weekly mail between England and Bombay, and the discontinuance of the postal service between Aden and Madras and Calcutta, I am directed by the Secretary of State for India in Council to transmit, for the information of Her Majesty's Postmaster General, the accompanying copy of a further letter, with its enclosure, from the Government of India, strongly supporting the proposed modifications in the existing contract with the Peninsular and Oriental Steam Navigation Company.

Sir Charles Wood concurs generally in the views entertained by the Government of India as to the importance of establishing a weekly communication with Bombay. It is manifestly desirable, and will, when the system of railways is completed throughout India, be practicable to distribute from Bombay all the letters for all parts of India arriving weekly at that port, and it will then be unnecessary to maintain the present postal service by sea with the ports of Calcutta and Madras. He trusts, therefore, that Her Majesty's Postmaster General will take such steps, at the proper time, in view to the termination of the existing contract with the Peninsular and Oriental Company as will set the Government free to make hereafter such an arrangement as is proposed.

I am, &c.
(signed) *Herman Merivale.*

The Secretary, General Post Office.

Enclosure 1, in No. 7.

HOME DEPARTMENT.

Post Office.—No. 12 of 1861, June 28th.

To the Right Honourable Sir *Charles Wood*, Bart., G.C.B., Secretary of State for India.

Sir,

WE have the honour to forward herewith the report* submitted to us by Mr. Riddell, the late Director General of the Post Office in India, upon the papers communicated with your Despatch, No. 11, dated the 24th of January, relative to the proposal made last year by Mr. Riddell for the establishment of a weekly postal communication between England and Bombay, in substitution of the existing arrangement, under which four mails are brought to India every month; namely, two to Bombay, and two by way of Galle to Madras and Calcutta.

2. Mr. Riddell's chief reasons for advising this change were, first, that the Government of India was needlessly burdened with the charge for the long† sea route by the way of Galle, when the shorter voyage to Bombay would answer every postal purpose; and, secondly, that the adoption of the alternative route by way of Galle, while it afforded no postal advantages to Bengal and Madras which would not be equally secured by the Bombay route, absolutely denied to far the greater part of India the benefits of four mails in a month. There is no doubt, we would remark, that Bombay, the greater portion of the Madras Presidency, and the whole of the Punjab and the North Western Provinces, receive only two mails a month under the existing arrangement.

* No. 2,889, dated 19 April 1861.

† Aden to Calcutta, 3,449 miles; Aden to Bombay, 1,664.

To Secretary of
State, No. 16 of
1860, dated 31
August.
No. 22 of 1860, dated
6 November.
No. 23 of 1860, dated
29 November.
No. 2 of 1861, dated
14 January.

3. In transmitting Mr. Riddell's letters to you, we expressed our concurrence in his views, and we stated that it was our intention to invite communications on the subject from the several Chambers of Commerce in India. The replies received from the Chambers were forwarded to you with our Despatches noted on the margin.

4. It is freely admitted by all these bodies that Mr. Riddell's suggestion must be carried into effect sooner or later. The Madras Chamber say, "When the railway communication between Bombay and Madras and Bombay and Calcutta is completed." The Calcutta Chamber say, "When the railways are so far advanced as to admit of the mails being conveyed at all seasons in five or six days between Bombay and Calcutta." But it is urged that the proposal is premature, as the mails now, it is alleged, cannot be punctually and rapidly conveyed from Bombay.

To Secretary of
State, No. 2 of 1861,
dated 14 January.

5. In a letter dated the 15th of December last, forwarded to you with the report of the Madras Chamber of Commerce, Mr. Riddell examined, in detail, the question of conveying the mails from Bombay to Calcutta and Madras respectively, and pronounced a confident opinion that it could be done satisfactorily. In submitting this letter to you, the President in Council observed, "We have confidence in Mr. Riddell's expectations of being able to convey the mails by that (the Bombay) route to Calcutta and Madras more expeditiously than they are now conveyed by the contract steamers *viâ* Galle."

6. With your Despatch of January the 24th, a letter was transmitted from the Postmaster General of England, enclosing a communication from the Peninsular and Oriental Company, with "copy of a letter from the Company's agent at Bombay, in which he calls attention to obvious objections to the proposed alterations."

7. The chief objection urged by the Bombay agent (Mr. Ritchie) is, that Mr. Riddell has examined the question from a narrow and local point of view, and that he has omitted to make any provision for the China, Straits, and Australian mails, which have to be placed at Galle. To this Mr. Riddell replies, that the subject which he was considering, and which he thought it his duty to consider, was the best and most economical mode of maintaining a postal communication between Europe and the Continent of India, and that it will not, he supposes, be maintained that India should be taxed for the maintenance of postal communications from which it derives no benefit.

8. Mr. Ritchie, on the assumption that the steamers to Galle must be maintained, suggests that the cheapest plan of effecting Mr. Riddell's object will be to have a branch line between Aden and Bombay. As this, he says, would be purely a mail service, he estimates the cost of it at 50,000 *l.* a year, if established in connection with the Calcutta service; or, if the contract terminated at Galle, the cost would be reduced by 17,358 *l.*, which he states is the rate now paid for the mileage between Galle and Calcutta.

9. As it is impossible to suppose that India will not shortly have a mail once a week (or four times a month) to Bombay, we apprehend that the practical questions for consideration are these:—

1st. When shall the change be made?

2nd. Shall it be attended with the withdrawal of all subsidy from the Indian revenues for the line between Aden and Calcutta?

10. On the first point, we have no doubt whatever that the change may safely be allowed to take effect on the termination of the monsoon of next year, say from October 1862, so far as the practicability of conveying the mails across India is in question. This will give ample time for preparation, and there will, intermediately, be some further advance by the railway.

11. On the second point, the argument for a subsidy is put by the Committee of the Calcutta Chamber of Commerce in the following manner:—

"The foregoing remarks embody the opinion of the Committee on this question, treating it as a purely departmental one. Viewing it in that light the Committee cannot but admit the force of your argument*, that if it is not necessary for postal purposes to subsidize steamers on this route, it is not proper to charge the postal revenues with the amount of such subsidy. At the same time, the importance of a regular and direct communication between Suez and the seat of the Supreme Government, maintained by a line of powerful steamers, is so evident, that if on the withdrawal of the postal subsidy, such a line cannot be made self-supporting, it will be the duty of this Chamber to recommend to the Government such a grant from the public revenues as will enable the Peninsular and Oriental Company, or any other Company, to maintain on this line a fleet of steamers in the highest efficiency."

12. We are not able to concur in the view thus expressed by the Chambers of Commerce. We cannot recognise the expediency or the obligation of supporting by Government aid a line of steamers between Aden and Calcutta, after the railway communication between Calcutta and Bombay shall be complete and without a break. Until this is the case, however, we admit it to be desirable that such a line should be supported, if necessary, in part from the Indian revenues, though, if the mails for all India are delivered at Bombay, there will be no necessity for the same speed and punctuality, or the same frequency of dispatch at all seasons of the year, for which the Peninsular and Oriental Company is now paid so highly. With a weekly mail *viâ* Bombay a less costly service will suffice, and indeed the general interests of the public may probably be better served if the Company be paid at a more moderate rate, which will oblige them to depend less exclusively than at present on the Government contract.

* The letter is
addressed to
Mr. Riddell.

13. We would remark with reference to the section between Aden and Galle, that as regards communication with the Straits and China, the interests of India are not much concerned in the mail communication by way of Galle; the direct opium steamers between Calcutta and Hong Kong carrying mails under the general provisions of the Post Office law.

We have, &c.
(signed) *Canning.*
H. Rose.
H. B. Frere.
R. Napier.

Fort William, 28 June 1861.

Enclosure 2, in No. 7.

From *H. B. Riddell*, Esq., Director General of the Post Office of India, to *W. Grey*, Esq., Secretary to the Government of India, No. 2889, dated 19 April 1861.

I HAVE now the honour to reply to your docket, No. 601, dated 4th March 1861, and regret that ill health has delayed my report upon the statements made by one of the Peninsular and Oriental Company's agents, Mr. Ritchie, who comments on the suggestions submitted by me for a more efficient and economical postal service between England and India.

2. Mr. Ritchie states, that "in dealing with the question Mr. Riddell has committed the common mistake of examining it from a narrow and local point of view, and as only affecting the community in which he lives." The subject which I had under my consideration, and which in my humble opinion it is my duty to consider, is the best and most economical mode of maintaining a postal communication between the Continent of India and Europe—that is, practically speaking, between Aden and India. The Indian revenue will properly be charged with the cost of any postal facilities which may be afforded for communication between India and China or Australia or any other British dependency in the East, but it will not, I conceive, be maintained that India should be taxed for the maintenance of postal communications from which it derives no benefit.

3. Under existing arrangements India pays for what is practically a fortnightly communication with Europe, a sum more than sufficient to provide a weekly communication. I propose that the present defective arrangements should be altered, and that for a sum less than is now paid, every part of India should have the benefit of 52 mails in the year.

4. The question as to whether the proposed modification of the present system will increase the cost to Great Britain of the Australian and China service is, as it appears to me, not one which should have much weight with the Government of India in considering the course to be taken for the speedy and economical conveyance of the Indian mails. It cannot be maintained that, for the benefit of Australia and China, India should be taxed for the maintenance of a fortnightly mail more than would pay for a weekly mail throughout the year; and I must repeat that so small a part of India is benefited by the Calcutta steamers that, practically, the communication with Europe is to India generally a fortnightly one. Mails for the Straits' settlement would not be delayed if carried by land from Bombay to Calcutta.

5. I do not enter into any examination of the figures given by Mr. Ritchie, as the question for the consideration of the Government of India is the best mode of carrying mails from Aden to India, and it ought not to be confused by any discussion regarding Australia and China mails.

6. What may be Mr. Ritchie's meaning in the paragraph extracted below, he may be able to explain:—

"It is not intended to deny that the present mail scheme is incapable of improvement, but Mr. Riddell's jealousy of the great Company which now monopolizes steam communication east of Suez, hinders him from suggesting the easiest and most economical remedy for existing evils, *i.e.*, the establishment of a branch mail line between Bombay and Aden in connection with the Calcutta service."

7. I am at a loss to comprehend Mr. Ritchie's meaning in the above. The suggestion which he asserts I have not made is precisely the only proposal which I have made, as far as the sea route east of Suez is concerned, except that I consider that the proposed connection between the direct Aden and Bombay line, and the Aden and Calcutta line, would be to India an unjustifiable expense. Mr. Ritchie must perceive a circuitous sea-line from Aden by Galle to Calcutta, liable to all delays and accidents to machinery and irregularities caused by weather, would be absolutely useless for Indian postal purposes if there were a direct communication between Aden and Bombay; and, this being the case, I can see no excuse for charging the Indian postal revenue with any part of the cost of the line between Aden and Galle, and Galle and Calcutta.

8. Mr. Ritchie has thought himself justified in charging me with having, from a feeling of jealousy to the Peninsular and Oriental Company, deliberately withheld from Government the suggestion of the easiest and best mode of improving the present mail scheme; but I shall not notice the absurd charge any further, having in the preceding paragraph shown that it is utterly groundless.

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9. I have already in former letters explained that there is no difficulty in providing for the distribution throughout India of weekly mails, and that in fact it is easier to arrange for a weekly than a fortnightly mail.

10. Mr. Ritchie is utterly ignorant of the arrangements which can be made for the conveyance of mails in India, and I doubt much if he even knows the routes by which the bulk of the mails is conveyed. Government will determine the weight to be attached to his assertion that the Indian Post Office is altogether incompetent to perform work which I have stated can be performed without difficulty.

11. I should recommend that notice of conclusion of the present contract should be given, so that the new arrangements should come in force as soon as the railway is open from Bombay to Asseerghur.

— No. 8. —

Mr. *F. Hill* to Mr. *Merivale*.

Sir,

General Post Office, 17 October 1861.

I HAVE received and laid before the Postmaster General your further letter of the 19th ultimo, with its enclosure, from the Government of India, on the subject of the proposal which has been made for the establishment of a weekly postal communication with India by way of Bombay, and the discontinuance of the packet service between Aden, Madras, and Calcutta.

You state that Sir Charles Wood concurs generally in the views entertained by the Government of India in regard to this question, and trusts that the Postmaster General will take steps at the proper time in view to the termination of the existing contracts with the Peninsular and Oriental Steam Navigation Company, so as to set Her Majesty's Government free to make hereafter such an arrangement as is proposed.

In reply, I am directed by the Postmaster General to state that the two contracts with the Peninsular and Oriental Company under which the mail service to the Mediterranean, India, and China is at present performed, may be terminated at any time on a notice of 12 months, but that his Lordship doubts the expediency of giving such notice until he can see some reasonable probability of tenders for the service being received from responsible and competent persons.

In the absence of competition, the Government would be very much in the power of the Peninsular and Oriental Company who, it may be expected, would then demand a considerably higher rate of payment than they at present receive for the services performed, particularly as the French Government has recently entered into a contract with the Company of the Messageries Impériales for a monthly service between Suez, India, and China, and has agreed to pay a subsidy amounting to more than three times as much per mile as the Peninsular and Oriental Company's subsidy.

The necessity for keeping up the communication between this country and China and Australia requires that, for the present at least, the line from Suez to Galle should be continued twice a month; but when the French packets shall have been established the British service may probably be reduced to a monthly one. The Postmaster General presumes that the opium steamers adverted to in the letter from the Government of India could hardly be relied upon for the conveyance of the English mails to and from Penang, Singapore, and China, supposing the whole of the Indian mails to be landed and embarked at Bombay.

How far the revenue of India should be charged with the cost of the lines to Point de Galle, and thence to China, is a question which, in his Lordship's opinion, may be settled without any reference to the termination of the existing contract.

The course which the Postmaster General considers it will be most advisable to follow is:—

1st. To inquire of the Peninsular and Oriental Company what deduction they will be prepared to make in the amount of their subsidy in the event of the Calcutta packet from Suez not being required to go beyond Point de Galle after October next year, and,

2ndly. To advertise at once, both in the United Kingdom and in India, for tenders for a branch packet twice a month between Aden and Bombay, thus making the communication with the latter port four times a month.

But, before his Lordship moves in the matter, he will be glad to hear whether this course is approved of by Sir Charles Wood.

H. Merivale, Esq., c.B.,
India Office.

I am, &c.
(signed) *F. Hill*.

No. 9.

Mr. *Merivale* to the Secretary to the Post Office.

Sir,

India Office, S. W., 19 November 1861.

THE Secretary of State for India in Council having had under his consideration Mr. Frederick Hill's letter, dated the 17th ultimo, communicating the course proposed to be taken by Her Majesty's Postmaster General, with a view to the eventual establishment of a weekly

a weekly communication with Bombay, and the discontinuance of the packet service between Aden, Madras, and Calcutta, I am directed to state in reply, that Sir Charles Wood fully acknowledges the sufficiency of the reasons which, in the opinion of Lord Stanley of Alderley, render it inexpedient to give notice at present to the Peninsular and Oriental Company of the termination of their postal contract.

With regard to the measures to be taken with a view to the eventual introduction of the changes desired by the Government of India, Sir Charles Wood concurs in the course proposed by Lord Stanley of Alderley, and he would only remark that, as the establishment of four monthly mails between Bombay and Aden would not entirely meet the requirements of the Indian Government which have been directed to a weekly mail or fifty-two (52) in the course of the year, he hopes that, should the result of the trial of the smaller number prove satisfactory, the first favourable opportunity will be taken for carrying out to their full extent the recommendations of the Government of India.

The Secretary, General Post Office.

I am, &c.
(signed) *Herman Merivale.*

No. 10.

The Postmaster General to the Treasury.

My Lords,

General Post Office, 28 November 1861.

I HAVE the honour to transmit to your Lordships the copy of a correspondence* which has taken place between the India Office and this department with reference to a proposal made by the Government of India for the establishment of a weekly postal communication between this country and India by way of Bombay, and the discontinuance of the present packet service between Aden, Madras, and Calcutta.

The course which I have informed Sir Charles Wood that I consider it will be advisable to adopt, with the view of meeting the wishes of the Government of India is,—

1st. To inquire of the Peninsular and Oriental Company what deduction they will be prepared to make in the amount of their subsidy in the event of the Calcutta packet from Suez not being required to go beyond Point de Galle after October next year, and,

2ndly. To advertise at once, both in the United Kingdom and in India, for tenders for a branch packet twice a month between Aden and Bombay, thus making the communication with the latter port four times a month.

Sir Charles Wood has expressed his concurrence in this plan, but he has, at the same time, pointed out that the establishment of four mails in each month between Bombay and Aden would not entirely meet the requirements of the Indian Government, which have been directed to a weekly mail or 52 mails in the year. He hopes, therefore, that should the result of the trial of the smaller number prove satisfactory, the first favourable opportunity will be taken for carrying out, to their full extent, the recommendations of that Government.

I have now to submit the arrangement for the consideration of your Lordships, and, in the event of your approving of the proposed alteration, to request that you will authorise me to advertise for tenders for the new service twice a month between Aden and Bombay.

On receiving the reply of the Peninsular and Oriental Company, and such tenders as may be sent in for the new service, I will report further to your Lordships on this subject, showing what will be the result of the alteration in a pecuniary point of view, in order that you may finally determine whether you will sanction the arrangement.

The Lords Commissioners of the Treasury.

I have, &c.
(signed) *Stanley of Alderley.*

No. 11.

Mr. *Hamilton* to the Postmaster General.

My Lord,

Treasury Chambers, 14 January 1862.

I HAVE laid before the Lords Commissioners of Her Majesty's Treasury your Lordship's letter of the 28th November last, and its enclosures, and I am desired by their Lordships to state in reply, that without at present committing themselves to any final opinion as to the proposal therein contained, for a weekly communication with India *via* Bombay, they authorise your Lordship to make inquiry of the Peninsular and Oriental Steam Navigation Company, and to advertise for tenders in the manner suggested by you.

The Postmaster General,
&c. &c. &c.

I have, &c.
(signed) *Geo. A. Hamilton.*

* See Letters, Nos. 7, 8 and 9.

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No. 12.

Mr. F. Hill to Mr. Howell.

Sir,

General Post Office, 23 January 1862.

REFERRING to your letter of the 6th December 1860, in which you transmitted the copy of a report from the agent of the Peninsular and Oriental Steam Navigation Company at Bombay, upon a proposal made by the Director General of the Post Office of India, for the adoption of Bombay as the port for the embarkation and disembarkation of the whole of the mails between this country and India, I am directed by the Postmaster General to inform you that a despatch has now been received from the Government of India stating that the arrangement recommended may safely be allowed to take effect on the termination of the monsoon of this year, say from October next, by which time they will be prepared to convey the English mails across India.

Under these circumstances the Postmaster General has been requested by the Lords Commissioners of the Treasury to advertise at once for tenders for a branch packet twice a month between Aden and Bombay, thus making the communication four times a month; and his Lordship requests that the Directors of the Peninsular and Oriental Company will be good enough to inform him what reduction they will be willing to make in the amount of their present subsidy in the event of the Calcutta packet from Suez not being required to go beyond Point de Galle.

C. W. Howell, Esq.,

Peninsular and Oriental Steam Navigation Company.

I am, &c.
(signed) F. Hill.

No. 13.

Mr. Howell to the Secretary to the Post Office.

Peninsular and Oriental Steam Navigation Company,
Offices, 122, Leadenhall-street, London, E.C.,
3 February 1862.

Sir,

I HAVE the honour, by order of the Board of Directors, to acknowledge the receipt of your letter dated 23rd ultimo, with reference to the adoption of Bombay as the point for the embarkation and disembarkation of the mails between this country and India, and requesting to be informed what reduction they would be willing to make in the amount of their present subsidy in the event of the Calcutta packets not being required to go beyond Point de Galle.

In reply, I am instructed to state that the Directors would not be enabled to make any abatement in the amount of the present subsidy in consideration of such a modification of the mail service, for the following reasons:—

1st. Because, in order to keep the steamers in efficient condition for the performance of the postal service between Suez and Galle, it would be necessary that they should proceed to the Company's docking and repairing establishment at Calcutta at the termination of every voyage.

2nd. Because the curtailment of the line at Galle would deprive the Company of the freight and passenger traffic between this country and Madras and Calcutta, which formed one of the principal elements in the calculation upon which the tender for the mail contract was based.

3rd. Because the foregoing reasons combined render it absolutely necessary that the steamers should proceed to Madras and Calcutta as at present, whether they carry the mails or not.

The Secretary of the General Post Office. I have, &c.
(signed) G. W. Howell, Secretary.

No. 14.

The Postmaster General to the Treasury.

My Lords,

General Post Office, 24 February 1862.

YOUR Lordships having been pleased by your letter of the 14th ultimo to authorise me to advertise for tenders for the conveyance of mails twice a month between Aden and Bombay, I have the honour to forward a draft form of tender and conditions of contract.

It is probable that your Lordships may, in this instance, wish to refer the conditions for the perusal of the Secretary of State for India.

On receiving back from your Lordships the form of tender and conditions, I will lose no time in advertising for tenders both in this country and in India. I request to be informed whether or not it is your desire that I should, on future occasions, send, for your consideration, the forms of tender and conditions of similar contracts.

The Lords Commissioners of the Treasury.

I have, &c.
(signed) Stanley of Alderley.

Enclosure in No. 14.

TENDER for Steam Vessels for Conveying Her Majesty's Mails between
Aden and Bombay.

Sir,

WE hereby offer to convey Her Majesty's mails twice in each calendar month, each way, between Aden and Bombay, by a sufficient number of steam vessels of adequate power, to be approved of by the Postmaster General, for the sum of £. per annum, subject to the several conditions marked A.

We will engage that the packet from Aden shall proceed at the same rate of speed from Bombay to Kurrachee for the additional sum of £. per annum, or, in all, £. per annum.

Or we will provide a branch packet from Bombay to Kurrachee and back, to travel at the rate of nautical miles per hour for the additional sum of £. per annum, or, in all, £. per annum.

Provided we be allowed hours, instead of 165 hours, for the voyage between Aden and Bombay, under ordinary circumstances, and hours, instead of 261 hours, for the voyage westward during the prevalence of the south-west monsoon, we will perform the service between Aden and Bombay twice a month for the sum of £. per annum.

When the space required for holding the mails shall exceed a hundred cubic tons measurement, we stipulate that an additional payment of £. per annum shall be made to us for each cubic ton over and above a hundred tons.

We will agree to an abatement of £. in the amount of the subsidy, on condition that the penalties for delay, instead of being absolute, shall not be payable when it is proved to the satisfaction of the Postmaster General that the delay has arisen from causes beyond our control.

If the contract be made for five years certain, we will agree to an abatement of £. from the subsidy demanded; and if the contract be made for seven years certain, we will agree to an abatement of £. from the subsidy.

We propose as our sureties in the penalty of 10,000 £., Mr. of , and Mr. of , and we refer you to as persons of whom inquiry can be made as to the responsibility of such sureties.

In the event of the tender being accepted, we engage that the vessels shall be ready for survey on the , in failure of which we agree to pay to Her Majesty the sum of 10 £. from the day on which the vessels ought to have been ready for survey for every day during which they shall not be ready for such survey. And we further engage that such vessels shall be complete for sea on the , in failure of which we agree to pay to Her Majesty the sum of 10 £. from the day on which the vessels ought to have been complete for sea for every day during which they shall not be complete for sea.

And we hereby agree to commence the said service on the , and in the event of such service not being commenced on such day, we hereby agree to pay to Her Majesty the sum of 100 £. for every day from that day until the said service shall be commenced by us.

And we further hereby agree that such respective sums of 10 £., 10 £., and 100 £., are to be considered not as penalties, but as liquidated damages, and payable whether any damage shall or shall not be sustained by reason of all or any one or more of such failures; or, in the event of any one or more of such failures, the Postmaster-General shall have the option of determining any agreement for such service by us.

And we do hereby agree to execute a contract according to the said conditions marked A., and for the performance of the said service.

The Secretary of the Post Office.

We are, &c.,
(Signature.)

(Address.)

N.B.—All tenders to be made upon this printed form, and they are to be addressed to the Secretary of the Post Office, with the words "Tender for the Conveyance of Mails between Bombay and Aden," in the left-hand corner of the envelope, and no tender will be received unless it be made precisely according to the preceding printed form.

Any conditions or alterations which the parties tendering may wish to suggest must be furnished in a separate letter at the time of making the tender.

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CONDITIONS of the TENDERS to be received for a Contract for the Conveyance of Her Majesty's Mails between *Aden* and *Bombay*.

(Referred to as marked A.)

1. THE service of conveying Her Majesty's mails from Aden to Bombay and back to be performed twice in each calendar month.

2. The parties tendering to state the additional sum demanded :—First, if the service to Bombay were extended, at the same rate of speed, to Kurrachee, Bombay becoming then a port of call. Secondly, if the contractors provided a branch packet to ply between Bombay and Kurrachee. In the latter case, the tender to state the rate of speed proposed to be maintained by the branch packet.

3. It must be stated in the tender when the parties tendering will be ready to commence the service.

4. Under the term "Her Majesty's Mails," are comprehended all boxes, bags, or packets of letters, newspapers, books, or printed papers, and every other article sent by the post, to whatever country or place they may be addressed, or in whatever country or place they may have originated; and also all empty bags, empty boxes, and other stores and articles used or to be used in carrying on the Post Office service, which shall be sent by or to or from the Post Office. Nevertheless, when the space required for holding the mails (*see par. 16*), shall exceed 100 cubic tons measurement, the contractors shall be allowed an additional payment per annum for each cubic ton, the amount of which must form part of the tender.

5. The tenders must provide for the mails being conveyed between Aden and Bombay in 165 hours, except during the prevalence of the south-west monsoon, when 261 hours will be allowed for the voyage westward, viz., from Bombay to Aden. But the parties tendering may also state upon what terms they would perform the service in a greater or less number of hours.

6. A premium of 50 *l.* will be given for every complete day of 24 hours which the time occupied in any voyage, between Aden and Bombay, may be less than that allowed under the contract.

7. A penalty of 500 *l.* to be incurred when the contractors fail in providing a vessel, in accordance with their contract, ready to put to sea at the appointed time, and also the sum of 500 *l.* for every successive day which shall elapse after such appointed time; and a penalty of 100 *l.* for every complete day consumed on the voyage between Aden and Bombay, from whatever cause arising, beyond the number of days allowed; but so that the full amount of any penalties for delay on any one voyage shall never exceed the portion of the subsidy applicable to such voyage. The payment by the contractors of any penalties shall in no way prejudice the right of the Postmaster General to treat the failure to provide a proper vessel at the appointed time, or to perform a voyage at or within the appointed time, as a breach of the contract.

8. The parties tendering may state what abatement in the amount of the subsidy they would make on condition that the penalties for delay, instead of being absolute, shall not be payable when it is proved to the satisfaction of the Postmaster General that the delay has arisen from causes beyond the control of the contractors.

9. The contractors must engage to supply, during the continuance of the contract, and to the satisfaction of the Postmaster-General, a sufficient number of steam vessels of adequate power and in all respects suited for the performance of the service within the time stipulated in the tender.

10. The Postmaster General to have power to require that the vessels to be used for the purposes of the contract shall be built on plans previously approved of by him or by the Lords of the Admiralty.

11. The vessels to be always supplied with all necessary and proper machinery, engines, apparel, furniture, stores, tackle, boats, fuel, oil, tallow, provisions, anchors, cables, fire-pumps and other proper means for extinguishing fire, lightning conductors, charts, chronometers, proper nautical instruments, and whatsoever else may be necessary for equipping the said vessels and rendering them constantly efficient for the service to be performed; and to be manned with legally qualified and competent officers and a sufficient crew of able seamen and other men. A medical officer, to be approved of by the Postmaster General, to be provided on board each packet, and who shall give medical attendance, medicines, and medicaments gratis to all persons conveyed under the contract, or whose passage money may be paid for in whole or in part by the Government.

12. The vessels are to be subject at all times to survey by officers in the employment of the Admiralty, and any defect discovered on such survey to be immediately made good by the contractors. This survey to extend not only to the vessels themselves, but also to the officers, engineers, crew, machinery, and everything which the contractors are bound to provide.

13. The days and hours of departure and arrival at each port are to be fixed by the Postmaster General, and may be altered from time to time by him on giving a notice to the contractors of three months. The Postmaster General also to have power to delay the departure of any vessel from any port for a period not exceeding 24 hours.

14. The

14. The Postmaster General to have power, on giving reasonable notice, to require the contractors to perform the service contracted for fortnightly, instead of twice in each calendar month, and in such case, the payments to be made to the contractors, and the abatements to be made by them to be increased by one-twelfth.

15. The Postmaster General to be at liberty otherwise to modify the service to be performed on giving reasonable notice to the contractors; the additional amount to be paid or deducted for any alteration, to be settled by agreement, or failing that, by arbitration in the usual manner.

16. The contractors to provide at their sole cost, to the satisfaction of the Postmaster General, a separate and convenient place of deposit for the mails on board each vessel, with secure lock and key.

17. In the event of the Postmaster General requiring it, a sorting-room for the purpose of sorting and making up the mails to be also provided, to the satisfaction of the Postmaster General, on board each vessel. The actual cost of erecting the sorting-room, and of providing the necessary furniture, lamps, &c., will be defrayed by the Postmaster General; but the furniture and lamps must be cleansed and kept in repair, and oil for the lamps must be supplied at the cost of the contractors. The services of the crew must also be given in the conveyance of the mails between the mail-room and the sorting-room.

18. Proper accommodation and mess to be provided, free of expense, for an officer of the Royal Navy in charge of the mails, and also, if required, for his servant. The Postmaster General to have power to substitute for a naval officer and his servant, a civil officer of the Post Office to take charge of the mails, and to be employed in sorting them, together with a servant. These officers, whether naval or civil, to be allowed to remain on board whilst the packet stays at all the ports to or from which the mails are conveyed. The naval or civil officers in charge of the mails to be victualled and otherwise treated as chief-cabin passengers, and servants as fore-cabin passengers. The Postmaster General further to have power to require the contractors to convey, if necessary, either one or two additional civil officers of the Post Office to be employed in sorting the mails. The passage money of these additional officers to be paid (in full of all charge for mess) at half the rates charged for ordinary passengers of a similar description.

19. The mails shall be conveyed in the vessels, and be delivered and received at each of the places to which the vessels are to proceed in the performance of the contract; and, at each port or place where the mails are to be delivered and received, the officer having charge of them shall, whenever and as often as by him deemed practicable or necessary, be conveyed on shore, and also from the shore to the vessel employed in the performance of the contract, together with, or if necessary for the performance of the duties of such officer, without Her Majesty's mails, in a suitable and seaworthy boat of not less than four oars, to be furnished with effectual covering for the mail bags, and to be provided and properly manned and equipped by the contractors.

20. Should the Postmaster General deem it expedient to place the said mails or any part thereof in charge of the master or commander of any of the said vessels, the said master or commander shall take charge of the same and make the usual Post Office oath or declaration, and furnish such journal, returns, and information, and perform such services, as the Postmaster General or his officers may require, and be responsible for the due receipt and delivery of such mails.

21. The contractors must not receive, or permit to be received, on board any of the vessels employed under the contract, any letters for conveyance other than those duly in charge of the mail officer, or which are or may be privileged by law; the said mail officer will have to report any default in this respect, and in case of any such default, the contractors will be liable to be proceeded against for a breach of the contract.

22. The whole postage of all mails conveyed in the vessels employed under the contract is to be at the disposal of Her Majesty's Postmaster General.

23. The contractors and all commanding and other officers of the vessels to be employed in the performance of the contract, and all agents, seamen, and servants of the contractors, shall at all times during the continuance of the contract, punctually attend to the orders and directions of the Postmaster General or of any of his officers or agents, as to the mode, time, and place of embarking and disembarking mails; and, for the purpose of embarking and disembarking mails at Bombay, the contractors must, if required by the Postmaster General, provide a steam-tug.

24. Every sum of money stipulated to be forfeited by the contractors shall be considered as stipulated or ascertained damages, and shall be deducted by the Postmaster General out of any monies then payable or which may thereafter become payable to the contractors, or the payment thereof may be enforced, with full costs of suit, at the discretion of the Postmaster General.

25. The contractors shall, when and as often as in writing they or the masters of their respective vessels shall be required so to do by the Postmaster General or by any officer or agent acting under his authority (such writing to specify the rank or description of the person or persons to be conveyed, and the accommodation to be provided for him or them), receive on board each of the vessels to be employed in the performance of the contract (in addition to the officers authorised to have the charge of the mails) any naval, military, and civil officers in the service of Her Majesty, not exceeding eight, and also their wives and children, as chief-cabin passengers, and any non-commissioned or warrant officers, not exceeding four, and also their wives and children, as fore-cabin passengers, and any number

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of seamen, marines, or soldiers in Her Majesty's service, not exceeding 10, and their wives and children as deck passengers, to be effectually protected from sun, rain, and bad weather; due notice being given (if practicable) to the agent of the contractors at the port of embarkation of such officers respectively and others being required to be conveyed.

26. The contractors must also undertake to convey any additional number of naval, military, and civil officers in the service of Her Majesty, not exceeding 10 in any one ship, with or without their wives and children, as chief-cabin passengers, and any additional number of non-commissioned and warrant officers, not exceeding six in any one ship, with or without their wives and children, as fore-cabin passengers, together with the servants of both chief and fore-cabin passengers, on the Postmaster General, his agents or officers, giving to the contractors or their agents at the port of embarkation the following notice, that is to say, in respect of passengers proceeding on the voyage from Aden to Bombay between the months of August and March, both inclusive, two calendar months, and at any other period of the year two weeks; and in respect of passengers proceeding on the voyage from Bombay to Aden between the months of December and May, both inclusive, two calendar months, and at any other period of the year two weeks. The passage money for all passengers to be conveyed on the requisition of the Postmaster General, to be paid (in full of all charge for mess) at the rates charged for ordinary passengers of a similar description.

27. When a passage has been ordered for any person at the expense of the Government, the payment will be made only on the production of the order for the passage, and a certificate from the person in the following form, viz. :—

“ I hereby certify, that on the _____ I embarked
at _____ as a _____ passenger on board the
mail steam-packet _____ for passage to _____
and landed at _____ on the _____.”

To this certificate the following addition is to be made in every case of a male cabin passenger, viz. :—

“ I further certify that the first dinner meal taken on board was on the _____
and the last dinner meal on the _____
“ Dated this _____ day of _____.”

And the correctness of the dates must be corroborated by the master of the packet, adding underneath the passenger's signature :—

“ The dates inserted in this certificate are correct.”

(Signature)

“ Master of the Packet.”

28. The passage-money for the wives and families of officers will be paid to the contractors by the officers themselves.

29. Whenever the contractors shall be required to convey any soldiers as deck passengers, other than those specially provided for by the contract, the contractors must provide them with adequate protection from rain, sun, and bad weather, such protection to include sufficient shelter on deck.

30. The contractors shall receive on board each of the vessels employed in the performance of the contract, and convey at the lowest rate of freight charged by the contractors for private goods, any number of small packages containing astronomical instruments, charts, wearing apparel, medicines, or other articles, and convey and deliver the same to, from, and between all or any of the ports or places to or from which the mails are to be conveyed, in performance of the contract, when so directed by the Postmaster General or his agents, or by the British naval officer in command of the station, and shall also receive on board each of the vessels, and convey and deliver to, from, and between all or any of the said ports or places any naval or other stores not exceeding 10 tons in weight, at any one time, in any one vessel, on receiving from the Postmaster General or any of his officers or agents, two days' previous notice of the intention to have such stores so conveyed; and the said contractors shall in all cases be strictly responsible for the due custody and safe delivery of the packages, articles, and stores.

31. The contract not to be terminable except on a notice of two years and a half, and the contractors to state what abatement they will make from the subsidy if the contract be made certain for five years, and what abatement if it be made certain for seven years.

32. The contract will not be binding until it has lain upon the Table of the House of Commons for one month, without disapproval, unless, previous to the lapse of that period, it has been approved of by a Resolution of the House.

33. Payments will be made quarterly out of monies to be provided by Parliament, on the production by the contractors, from time to time, to the Receiver and Accountant General of the Post Office, of certificates from the proper officers that the contract has been strictly and punctually performed, subject to the amount of penalties and other sums (if any) being thereout deducted.

34. The Government shall at any time during the continuance of the contract, in case of great public emergency, have power to purchase all or any of the vessels at a valuation, or to charter the same exclusively for Her Majesty's service; the valuation or rate of hire to be

be agreed on by the Admiralty and the contractors, or failing such agreement, by arbitration in the usual manner.

35. In case of any such purchase or hire, the contractors shall be at liberty either to terminate the contract, or, if they can provide other vessels in proper time, to continue it; or, with the consent of the Postmaster General, and on such terms as may be agreed upon they may continue to perform part only of the contract.

36. The contractors must not assign, underlet, or dispose of the contract, or any part thereof, without the consent in writing of the Postmaster General.

37. In case of any great or habitual breach of the contract, the Postmaster General may terminate it without previous notice, and this without giving the contractors any claim to compensation.

38. In pursuance of the provisions of the Act 22 Geo. 3, c. 45, no Member of the House of Commons can be admitted to any share or part of the contract, or to any benefit to arise therefrom.

39. The contractors to be bound with two responsible sureties, to be named in their tenders, in the penalty of 10,000 *l.* for the due fulfilment of the contract; and they must furnish the names of persons of whom inquiry can be made as to the responsibility of the sureties proposed.

40. The Postmaster General does not engage to accept the lowest tender, irrespective of other considerations, or indeed to accept any tender.

No. 15.

Mr. *F. Peel*, M.P., to the Postmaster General.

My Lord,

Treasury Chambers, 21 March 1862.

I AM desired by the Lords Commissioners of Her Majesty's Treasury to transmit to you the enclosed copy of a letter from the India Office, dated the 8th instant, and to state that, subject to the modifications proposed by Sir Charles Wood, their Lordships approve of the draft form of tender and conditions of contract for the conveyance of mails twice a month between Aden and Bombay, which accompanied your Lordship's letter of the 24th ultimo, and which are herewith returned.

Their Lordships understand the new service to be proposed as a substitute for the service to and from Madras and Calcutta, and to be intended only to take effect upon the latter being discontinued; I am therefore to request that your Lordship, in reporting upon any tenders that may be sent in, will at the same time state what will be the reduction in the subsidy now payable to the Peninsular and Oriental Steam Packet Company, and what effect in a pecuniary sense, and as far as this country is concerned, the proposed plan will have.

With regard to the last paragraph in your Lordship's letter, I am to state that it is the wish of this Board that, prior to advertising for tenders for contracts of a similar nature, the forms of tender and conditions of contract should at all times be submitted for their consideration.

The Postmaster General,
&c. &c. &c.

I have, &c.
(signed) *F. Peel*.

Enclosure in No. 15.

Sir,

India Office, 8 March 1862.

THE Secretary of State for India has had under his consideration in council your letter, dated 26th ultimo, forwarding, for the remarks of Sir Charles Wood, the draft of a form of tender, for the establishment of steam communication twice a month between Aden and Bombay, in pursuance of a recommendation of Her Majesty's Postmaster General.

Sir Charles Wood, as the Lords Commissioners of Her Majesty's Treasury are aware, has already expressed his concurrence in the proposal to take measures for the performance of the additional postal service in question, pending an entire readjustment of the mail service in the Indian Seas, and has no observations to make on the form of the tender for that service, or on the conditions on which tenders are to be received.

In any contract, however, which may be concluded, it will be sufficient to provide for the performance of the service between Bombay and Kurrachee, by a branch steamer at any future time if Her Majesty's Government should require it, and from such date as may hereafter be fixed by them, a contract for the service, by a local company being now in operation, and Sir Charles Wood trusts that the Lords of the Treasury will see their way to providing for an additional fortnightly mail to and from Bombay, instead of two in each calendar month; and that, except during the south-west monsoon, 165 hours will be fixed as the minimum period for the voyage between Aden and Bombay.

With regard to the duration of the contract, he would suggest that, as it would doubtless

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be desirable, if the existing contracts with the Peninsular and Oriental Company should be determined, that the arrangement for the additional service to Bombay should cease, at the same time the power of determining the proposed contract at one year's notice should be reserved to Her Majesty's Government.

The Secretary, Treasury.

I am, &c.
(signed) *Herman Merivale.*

No. 16.

The Postmaster General to the Treasury.

My Lords,

General Post Office, 28 March 1862.

I BEG to acknowledge the receipt of your letter of the 21st instant, informing me that, subject to the modifications proposed by Sir Charles Wood, your Lordships approve of the draft form of tender and conditions of contract which I transmitted to you on the 24th ultimo.

The only alteration in the form which appear necessary are shown in the accompanying draft.

It will be in your Lordships' power, should you think such a course desirable when the tenders are sent in, to accept an offer for a fortnightly service, in preference to one twice in each calendar month, as well as to require that the time occupied between Aden and Bombay shall not exceed 165 hours, except during the south-west monsoon.

With regard to the suggestion of Sir Charles Wood, that any contract that may be entered into should be terminable at one year's notice, instead of on a notice of two years and a half, as specified in the accompanying form, I fear that if it be adopted this department may be placed hereafter in a position of difficulty, similar to that which now exists in the case of the contract with the Peninsular and Oriental Steam Navigation Company.

That contract can now be terminated at any time on the company giving twelve months' notice, and looking at the time necessary for building large steam ships, and bearing in mind that to this must be added the time required for preparing the forms of tenders, for advertising, and for considering the several tenders that may be sent in, it is certain that a period of twelve months is not sufficient to give the department the benefit of an effective competition.

I cannot recommend your Lordships, therefore, to alter the form of tender in this respect.

The Lords Commissioners of
the Treasury.

I have, &c.
(signed) *Stanley of Alderley.*

Enclosure in No. 16.

TENDER for Steam Vessels for conveying Her Majesty's Mails between *Aden* and *Bombay*.

Sir,

WE hereby offer to convey Her Majesty's Mails twice in each calendar month, each way, between Aden and Bombay, by a sufficient number of steam vessels of adequate power, to be approved of by the Postmaster General, for the sum of £. per annum, subject to the several conditions marked A.

We will engage to provide, whenever required by Her Majesty's Government, a branch packet from Bombay to Kurrachee and back, to travel at the rate of nautical miles per hour for the additional sum of £. per annum, or, in all, £. per annum.

Provided we be allowed hours, instead of 165 hours, for the voyage between Aden and Bombay, under ordinary circumstances, and hours, instead of 261 hours, for the voyage westward during the prevalence of the south-west monsoon, we will perform the service between Aden and Bombay twice a month for the sum of £. per annum.

When the space required for holding the mails shall exceed a hundred cubic tons measurement, we stipulate that an additional payment of £. per annum shall be made to us for each cubic ton over and above a hundred tons.

We will agree to an abatement of £. in the amount of the subsidy, on condition that the penalties for delay, instead of being absolute, shall not be payable when it is proved to the satisfaction of the Postmaster General that the delay has arisen from causes beyond our control.

If the contract be made for five years certain, we will agree to an abatement of £. from the subsidy demanded; and if the contract be made for seven years certain, we will agree to an abatement of £. from the subsidy.

We propose as our sureties in the penalty of 10,000 £, Mr. of , and Mr. of , and we

we refer you to _____ as persons of whom inquiry can be made as to the responsibility of such sureties.

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In the event of the tender being accepted, we engage that the vessels shall be ready for survey on the _____, in failure of which we agree to pay to Her Majesty the sum of 10*l.* from the day on which the vessels ought to have been ready for survey for every day during which they shall not be ready for such survey. And we further engage that such vessels shall be complete for sea on the _____, in failure of which we agree to pay to Her Majesty the sum of 10*l.* from the day on which the vessels ought to have been complete for sea for every day during which they shall not be complete for sea.

And we hereby agree to commence the said service on the _____, and in the event of such service not being commenced on such day, we hereby agree to pay to Her Majesty the sum of 100*l.* for every day from that day until the said service shall be commenced by us.

And we further hereby agree that such respective sums of 10*l.*, 10*l.*, and 100*l.* are to be considered not as penalties, but as liquidated damages, and payable whether any damage shall or shall not be sustained by reason of all or any one or more of such failures; or in the event of any one or more of such failures, the Postmaster General shall have the option of determining any agreement for such service by us.

And we do hereby agree to execute a contract according to the said conditions marked A., and for the performance of the said service.

We are, &c.

(Signature)

(Address)

The Secretary of the Post Office.

N.B.—All Tenders to be made upon this printed form, and they are to be addressed to the Secretary of the Post Office, with the words "Tender for the conveyance of Mails between Bombay and Aden" in the left-hand corner of the envelope, and no Tender will be received unless it be made precisely according to the preceding printed form.

Any conditions or alterations which the parties tendering may wish to suggest must be furnished in a separate letter at the time of making the tender.

CONDITIONS of the TENDERS to be received for a Contract for the Conveyance of Her Majesty's Mails between *Aden* and *Bombay*.

(Referred to as marked A.)

1. The service of conveying Her Majesty's Mails from Aden to Bombay and back to be performed twice in each calendar month.

2. The parties tendering to state the additional sum demanded, if the contractors provided a branch packet to ply between Bombay and Kurrachee. The tender to state the rate of speed proposed to be maintained by the branch packet.

3. It must be stated in the tender when the parties tendering will be ready to commence the service.

4. Under the term "Her Majesty's Mails," are comprehended all boxes, bags, or packets of letters, newspapers, books, or printed papers, and every other article sent by the post, to whatever country or place they may be addressed, or in whatever country or place they may have originated; and also all empty bags, empty boxes, and other stores and articles used or to be used in carrying on the Post Office service, which shall be sent by or to or from the Post Office. Nevertheless, when the space required for holding the mails (*see* par. 16) shall exceed a hundred cubic tons measurement, the contractors shall be allowed an additional payment per annum for each cubic ton, the amount of which must form part of the tender.

5. The tenders must provide for the mails being conveyed between Aden and Bombay in 165 hours, except during the prevalence of the south-west monsoon, when 261 hours will be allowed for the voyage westward, viz., from Bombay to Aden. But the parties tendering may also state upon what terms they would perform the service in a greater or less number of hours.

6. A premium of 50*l.* will be given for every complete day of 24 hours which the time occupied in any voyage, between Aden and Bombay, may be less than that allowed under the contract.

7. A penalty of 500*l.* to be incurred when the contractors fail in providing a vessel, in accordance with their contract, ready to put to sea at the appointed time, and also the sum of 500*l.* for every successive day which shall elapse after such appointed time; and a penalty of 100*l.* for every complete day consumed on the voyage between Aden and Bombay, from whatever cause arising, beyond the number of days allowed; but so that the full amount of any penalties for delay on any one voyage shall never exceed the portion of the subsidy applicable to such voyage. The payment by the contractors of any penalties shall in no way prejudice the right of the Postmaster General to treat the failure to provide a proper

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vessel at the appointed time, or to perform a voyage at or within the appointed time, as a breach of the contract.

8. The parties tendering may state what abatement in the amount of the subsidy they would make on condition that the penalties for delay instead of being absolute, shall not be payable when it is proved to the satisfaction of the Postmaster General that the delay has arisen from causes beyond the control of the contractors.

9. The contractors must engage to supply, during the continuance of the contract, and to the satisfaction of the Postmaster General, a sufficient number of steam vessels of adequate power and in all respects suited for the performance of the service within the time stipulated in the tender.

10. The Postmaster General to have power to require that the vessels to be used for the purposes of the contract shall be built on plans previously approved of by him or by the Lords of the Admiralty.

11. The vessels to be always supplied with all necessary and proper machinery, engines, apparel, furniture, stores, tackle, boats, fuel, oil, tallow, provisions, anchors, cables, fire-pumps, and other proper means for extinguishing fire, lightning conductors, charts, chronometers, proper nautical instruments, and whatsoever else may be necessary for equipping the said vessels and rendering them constantly efficient for the service to be performed; and to be manned with legally qualified and competent officers and a sufficient crew of able seamen and other men. A medical officer, to be approved of by the Postmaster General, to be provided on board each packet, and who shall give medical attendance, medicines, and medicaments gratis to all persons conveyed under the contract, or whose passage money may be paid for in whole or in part by the Government.

12. The vessels are to be subject at all times to survey by officers in the employment of the Admiralty, and any defect discovered on such survey to be immediately made good by the contractors. This survey to extend not only to the vessels themselves, but also to the officers, engineers, crew, machinery, and everything which the contractors are bound to provide.

13. The days and hours of departure and arrival at each port are to be fixed by the Postmaster General, and may be altered from time to time by him on giving a notice to the contractors of three months. The Postmaster General also to have power to delay the departure of any vessel from any port for a period not exceeding 24 hours.

14. The Postmaster General to have power, on giving reasonable notice, to require the contractors to perform the service contracted for fortnightly, instead of twice in each calendar month, and in such case the payments to be made to the contractors, and the abatements to be made by them to be increased by one-twelfth.

15. The Postmaster General to be at liberty otherwise to modify the service to be performed, on giving reasonable notice to the contractors; the additional amount to be paid or deducted for any alteration, to be settled by agreement, or failing that, by arbitration in the usual manner.

16. The contractors to provide at their sole cost, to the satisfaction of the Postmaster General, a separate and convenient place of deposit for the mails on board each vessel, with secure lock and key.

17. In the event of the Postmaster General requiring it, a sorting room for the purpose of sorting and making up the mails to be also provided, to the satisfaction of the Postmaster General, on board each vessel. The actual cost of erecting the sorting room, and of providing the necessary furniture, lamps, &c., will be defrayed by the Postmaster General, but the furniture and lamps must be cleansed and kept in repair, and oil for the lamps must be supplied at the cost of the contractors. The services of the crew must also be given in the conveyance of the mails between the mail room and the sorting room.

18. Proper accommodation and mess to be provided, free of expense, for an officer of the Royal Navy in charge of the mails, and also, if required, for his servant. The Postmaster General to have power to substitute for a naval officer and his servant, a civil officer of the Post Office to take charge of the mails, and to be employed in sorting them, together with a servant. These officers, whether naval or civil, to be allowed to remain on board whilst the packet stays at all the ports to or from which the mails are conveyed. The naval or civil officers in charge of the mails to be victualled and otherwise treated as chief cabin passengers, and servants as fore cabin passengers. The Postmaster General further to have power to require the contractors to convey, if necessary, either one or two additional civil officers of the Post Office to be employed in sorting the mails. The passage money of these additional officers to be paid (in full of all charge for mess), at half the rates charged for ordinary passengers of a similar description.

19. The mails shall be conveyed in the vessels, and be delivered and received at each of the places to which the vessels are to proceed in the performance of the contract; and at each port or place where the mails are to be delivered and received, the officer having charge of them shall, whenever and as often as by him deemed practicable or necessary, be conveyed on shore, and also from the shore to the vessel employed in the performance of the contract, together with, or if necessary for the performance of the duties of such officer, without, Her Majesty's Mails, in a suitable and seaworthy boat of not less than four oars, to be furnished with effectual covering for the mail bags, and to be provided and properly manned and equipped by the contractors.

20. Should the Postmaster General deem it expedient to place the said mails or any part thereof in charge of the master or commander of any of the said vessels, the said master or commander shall take charge of the same, and make the usual Post Office oath or declaration,

ration, and furnish such journal, returns, and information, and perform such services, as the Postmaster General or his officers may require, and be responsible for the due receipt and delivery of such mails.

21. The contractors must not receive, or permit to be received on board any of the vessels employed under the contract, any letters for conveyance other than those duly in charge of the mail officer, or which are or may be privileged by law; the said mail officer will have to report any default in this respect, and in case of any such default, the contractors will be liable to be proceeded against for a breach of the contract.

22. The whole postage of all mails conveyed in the vessels employed under the contract is to be at the disposal of Her Majesty's Postmaster General.

23. The contractors and all commanding and other officers of the vessels to be employed in the performance of the contract, and all agents, seamen, and servants of the contractors, shall at all times during the continuance of the contract, punctually attend to the orders and directions of the Postmaster General, or of any of his officers or agents, as to the mode, time, and place of embarking and disembarking mails; and, for the purpose of embarking and disembarking mails at Bombay, the contractors must, if required by the Postmaster General, provide a steam tug.

24. Every sum of money stipulated to be forfeited by the contractors shall be considered as stipulated or ascertained damages, and shall be deducted by the Postmaster General out of any monies then payable, or which may thereafter become payable, to the contractors, or the payment thereof may be enforced, with full costs of suit, at the discretion of the Postmaster General.

25. The contractors shall, when and as often as in writing they or the masters of their respective vessels shall be required so to do by the Postmaster General, or by any officer or agent acting under his authority (such writing to specify the rank or description of the person or persons to be conveyed, and the accommodation to be provided for him or them), receive on board each of the vessels to be employed in the performance of the contract (in addition to the officers authorised to have the charge of the mails) any naval, military, and civil officers in the service of Her Majesty, not exceeding eight, and also their wives and children, as chief-cabin passengers, and any non-commissioned or warrant officers, not exceeding four, and also their wives and children, as fore-cabin passengers, and any number of seamen, marines, or soldiers in Her Majesty's service, not exceeding ten, and their wives and children, as deck passengers, to be effectually protected from sun, rain, and bad weather; due notice being given (if practicable) to the agent of the contractors at the port of embarkation of such officers respectively and others being required to be conveyed.

26. The contractors must also undertake to convey any additional number of naval, military, and civil officers in the service of Her Majesty, not exceeding ten in any one ship, with or without their wives and children, as chief cabin passengers, and any additional number of non-commissioned and warrant officers, not exceeding six in any one ship, with or without their wives and children, as fore-cabin passengers, together with the servants of both chief and fore-cabin passengers, on the Postmaster General, his agents, or officers, giving to the contractors or their agents at the port of embarkation the following notice, that is to say, in respect of passengers proceeding on the voyage from Aden to Bombay between the months of August and March, both inclusive, two calendar months, and at any other period of the year two weeks; and in respect of passengers proceeding on the voyage from Bombay to Aden between the months of December and May, both inclusive, two calendar months, and at any other period of the year two weeks. The passage money for all passengers to be conveyed on the requisition of the Postmaster General, to be paid (in full of all charge for mess) at the rates charged for ordinary passengers of a similar description.

27. When a passage has been ordered for any person at the expense of the Government, the payment will be made only on the production of the order for the passage, and a certificate from the person in the following form, viz. :—

"I hereby certify that on the at the Mail Steam Packet and landed at	as a for passage to on the	I embarked passenger on board ."
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To this certificate, the following addition is to be made in every case of a male cabin passenger, viz. :—

"I further certify, that the first dinner meal taken on board was on the
, and the last dinner meal on the

"Dated this day of ."

And the correctness of the dates must be corroborated by the master of the packet, adding underneath the passenger's signature,—

"The dates inserted in this certificate are correct."

(signature)

"Master of the Packet."

28. The passage money for the wives and families of officers will be paid to the contractors by the officers themselves.

29. Whenever the contractors shall be required to convey any soldiers as deck passengers, other than those specially provided for by the contract, the contractors must provide them with adequate protection from rain, sun, and bad weather, such protection to include sufficient shelter on deck.

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30. The contractors shall receive on board each of the vessels employed in the performance of the contract, and convey at the lowest rate of freight charged by the contractors for private goods, any number of small packages containing astronomical instruments, charts, wearing apparel, medicines, or other articles, and convey and deliver the same to, from, and between all or any of the ports or places to or from which the mails are to be conveyed, in performance of the contract, when so directed by the Postmaster General, or his agents, or by the British naval officer in command of the station, and shall also receive on board each of the vessels, and convey and deliver to, from, and between all or any of the said ports or places, any naval or other stores not exceeding ten tons in weight, at any one time, in any one vessel, on receiving from the Postmaster General or any of his officers or agents, two days' previous notice of the intention to have such stores so conveyed; and the said contractors shall in all cases be strictly responsible for the due custody and safe delivery of the packages, articles, and stores.

31. The contract not to be terminable except on a notice of two years and a half; and the contractors to state what abatement they will make from the subsidy if the contract be made certain for five years, and what abatement if it be made certain for seven years.

32. The contract will not be binding until it has lain upon the table of the House of Commons for one month, without disapproval, unless, previous to the lapse of that period, it has been approved of by a Resolution of the House.

33. Payments will be made quarterly out of monies to be provided by Parliament, on the production by the contractors, from time to time, to the Receiver and Accountant General of the Post Office, of certificates from the proper officers that the contract has been strictly and punctually performed, subject to the amount of penalties and other sums (if any) being thereout deducted.

34. The Government shall at any time during the continuance of the contract, in case of great public emergency, have power to purchase all or any of the vessels at a valuation, or to charter the same exclusively for Her Majesty's service; the valuation or rate of hire to be agreed on by the Admiralty and the contractors, or failing such agreement, by arbitration in the usual manner.

35. In case of any such purchase or hire, the contractors shall be at liberty either to terminate the contract, or, if they can provide other vessels in proper time, to continue it; or, with the consent of the Postmaster General, and on such terms as may be agreed upon, they may continue to perform part only of the contract.

36. The contractors must not assign, underlet, or dispose of the contract, or any part thereof, without the consent in writing of the Postmaster General.

37. In case of any great or habitual breach of the contract, the Postmaster General may terminate it without previous notice, and this without giving the contractors any claim to compensation.

38. In pursuance of the provisions of the Act 22 Geo. 3, c. 45, no member of the House of Commons can be admitted to any share or part of the contract, or to any benefit to arise therefrom.

39. The contractors to be bound with two responsible sureties, to be named in their tenders, in the penalty of 10,000 £, for the due fulfilment of the contract; and they must furnish the names of persons of whom inquiry can be made as to the responsibility of the sureties proposed.

40. The Postmaster General does not engage to accept the lowest tender, irrespective of other considerations, or indeed to accept any tender.

No. 17.

Mr. Hamilton to the Postmaster General.

My Lord,

Treasury Chambers, 12 April 1862.

WITH reference to your letter of the 28th ultimo relative to the proposed additional mail service between Aden and Bombay; I am desired by the Lords Commissioners of Her Majesty's Treasury, to transmit to you the enclosed copy of a letter from the India Office upon the subject, dated 11th instant, and I am at the same time to return to you the amended draft form of tender, and conditions of contract which accompanied your letter, and to convey to you their Lordships' authority for the issue of the necessary notices in conformity therewith.

The Postmaster General,
&c. &c.

I have, &c.
(signed) George A. Hamilton.

Enclosure in No. 17.

Sir,

India Office, 11 April 1862.

I AM directed by the Secretary of State for India in Council to acknowledge the receipt of your letter, dated 29th ultimo, with the enclosed copy of a letter from the Postmaster General relating to the additional mail service between Aden and Bombay; and in reply to state

state that under the circumstances stated by the Postmaster General, Sir Charles Wood will not urge the adoption of his suggestion that the proposed contract shall be terminable on a shorter notice than two years and a half.

I am, &c.
(signed) *Herman Merivale.*

No. 18.

Mr. F. Hill to Mr. Merivale.

(Immediate.)

Sir, General Post Office, 17 April 1862.

THE Postmaster General has now been informed by the Lords Commissioners of the Treasury, that the form of tender, and conditions of contract for the proposed additional mail service between Aden and Bombay, has received the approval of the Secretary of State for India in Council; and I am accordingly directed to transmit to you, 40 copies of that form, with a request that one half may be forwarded to Calcutta by the mail of the 20th instant, and the other half to Bombay, by the mail of the 27th instant.

I am also to send you copies of the advertisement, about to be issued in this country.

The Postmaster General desires me to suggest, that Sir Charles Wood should instruct the Governor General of India, and the Governor of Bombay to cause advertisements somewhat similar to be issued in India, fixing the 1st September next, as the day upon which tenders will be received by the Governments of Calcutta and Bombay, respectively from persons willing to undertake the proposed service.

The tenders received should be forwarded to this country, (with the opinion of the authorities in India, as to the capabilities of the parties tendering to perform the service efficiently) by the mails to leave Calcutta on the 10th September, and Bombay on the 12th September.

Herman Merivale, Esq., C.B.,
India Office.

I have, &c.
(signed) *F. Hill.*

Enclosure No. 1, in No. 18.

TENDER for Steam Vessels for Conveying Her Majesty's Mails between *Aden* and *Bombay*.

Sir,

WE hereby offer to convey Her Majesty's Mails twice in each calendar month, each way, between Aden and Bombay, by a sufficient number of steam vessels of adequate power, to be approved of by the Postmaster General, for the sum of £ per annum, subject to the several conditions marked A.

We will engage to provide, whenever required by Her Majesty's Government, a branch packet from Bombay to Kurrachee and back, to travel at the rate of nautical miles per hour, for the additional sum of £ per annum, or, in all £ per annum.

Provided we be allowed hours, instead of 165 hours, for the voyage between Aden and Bombay, under ordinary circumstances, and hours, instead of 261 hours, for the voyage westward during the prevalence of the south-west monsoon, we will perform the service between Aden and Bombay twice a month for the sum of £ per annum.

When the space required for holding the mails shall exceed a hundred cubic tons measurement, we stipulate that an additional payment of £ per annum shall be made to us for each cubic ton over and above a hundred tons.

We will agree to an abatement of £ in the amount of the subsidy, on condition that the penalties for delay, instead of being absolute, shall not be payable when it is proved to the satisfaction of the Postmaster General that the delay has arisen from causes beyond our control.

If the contract be made for five years certain, we will agree to an abatement of £ from the subsidy demanded; and if the contract be made for seven years certain, we will agree to an abatement of £ from the subsidy.

We propose as our sureties in the penalty of 10,000 £, Mr. of , and Mr. of , and we refer you to

as persons of whom inquiry can be made as to the responsibility of such sureties.

In the event of the Tender being accepted, we engage that the vessels shall be ready for survey on the , in failure of which we agree to pay to Her Majesty the sum of 10 £ from the day on which the vessels ought to have been ready for survey for every day during which they shall not be ready for such survey. And we further engage that such vessels shall be complete for sea on the , in failure of which we agree to pay to Her Majesty the sum of 10 £ from the day on which the vessels ought to have been complete for sea for every day during which they shall not be complete for sea.

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And we hereby agree to commence the said service on the _____, and in the event of such service not being commenced on such day, we hereby agree to pay to Her Majesty the sum of 100 *l.* for every day from that day until the said service shall be commenced by us.

And we further hereby agree that such respective sums of 10 *l.*, 10 *l.*, and 100 *l.* are to be considered not as penalties, but as liquidated damages, and payable whether any damage shall or shall not be sustained by reason of all or any one or more of such failures; or, in the event of any one or more of such failures, the Postmaster General shall have the option of determining any agreement for such service by us.

And we do hereby agree to execute a contract according to the said conditions marked A., and for the performance of the said service.

We are, &c.

(Signature.)

(Address.)

N. B.—All Tenders to be made upon this printed form, and they are to be addressed to _____ with the words “Tender for the Conveyance of mails between Bombay and Aden” in the left hand corner of the envelope, and no Tender will be received unless it be made precisely according to the preceding printed form.

Any conditions or alterations which the parties tendering may wish to suggest must be furnished in a separate letter at the time of making the Tender.

CONDITIONS of the TENDERS to be received for a Contract for the Conveyance of Her Majesty's Mails between *Aden* and *Bombay*.

(Referred to as marked A.)

1. The service of conveying Her Majesty's Mails from Aden to Bombay and back to be performed twice in each calendar month.

2. The parties tendering to state the additional sum demanded, if the contractors provided a branch packet to ply between Bombay and Kurrachee. The tender to state the rate of speed proposed to be maintained by the branch packet.

3. It must be stated in the tender when the parties tendering will be ready to commence the service.

4. Under the term “Her Majesty's Mails,” are comprehended all boxes, bags, or packets of letters, newspapers, books, or printed papers, and every other article sent by the post, to whatever country or place they may be addressed, or in whatever country or place they may have originated; and also all empty bags, empty boxes, and other stores and articles used or to be used in carrying on the Post Office service, which shall be sent by, or to, or from the Post Office. Nevertheless, when the space required for holding the mails (see par. 16.) shall exceed a hundred cubic tons measurement, the contractors shall be allowed an additional payment per annum for each cubic ton, the amount of which must form part of the tender.

5. The tenders must provide for the mails being conveyed between Aden and Bombay in 165 hours, except during the prevalence of the south-west monsoon, when 261 hours will be allowed for the voyage westward, viz., from Bombay to Aden. But the parties tendering may also state upon what terms they would perform the service in a greater or less number of hours.

6. A premium of fifty pounds will be given for every complete day of 24 hours which the time occupied in any voyage, between Aden and Bombay, may be less than that allowed under the contract.

7. A penalty of five hundred pounds to be incurred when the contractors fail in providing a vessel, in accordance with their contract, ready to put to sea at the appointed time, and also the sum of five hundred pounds for every successive day which shall elapse after such appointed time; and a penalty of one hundred pounds for every complete day consumed on the voyage between Aden and Bombay, from whatever cause arising, beyond the number of days allowed; but so that the full amount of any penalties for delay on any one voyage shall never exceed the portion of the subsidy applicable to such voyage. The payment by the contractors of any penalties shall in no way prejudice the right of the Postmaster General to treat the failure to provide a proper vessel at the appointed time, or to perform a voyage at or within the appointed time, as a breach of the contract.

8. The parties tendering may state what abatement in the amount of the subsidy they would make on condition that the penalties for delay instead of being absolute, shall not be payable when it is proved to the satisfaction of the Postmaster General that the delay has arisen from causes beyond the control of the contractors.

9. The contractors must engage to supply, during the continuance of the contract, and to the satisfaction of the Postmaster General, a sufficient number of steam vessels of adequate power

power and in all respects suited for the performance of the service within the time stipulated in the tender.

10. The Postmaster General to have power to require that the vessels to be used for the purposes of the contract shall be built on plans previously approved of by him or by the Lords of the Admiralty.

11. The vessels to be always supplied with all necessary and proper machinery, engines, apparel, furniture, stores, tackle, boats, fuel, oil, tallow, provisions, anchors, cables, fire-pumps, and other proper means for extinguishing fire, lightning conductors, charts, chronometers, proper nautical instruments, and whatsoever else may be necessary for equipping the said vessels and rendering them constantly efficient for the service to be performed; and to be manned with legally qualified and competent officers and a sufficient crew of able seamen and other men. A medical officer, to be approved of by the Postmaster General, to be provided on board each packet, and who shall give medical attendance, medicines, and medicaments gratis to all persons conveyed under the contract, or whose passage money may be paid for in whole or in part by the Government.

12. The vessels are to be subject at all times to survey by officers in the employment of the Admiralty, and any defect discovered on such survey to be immediately made good by the contractors. This survey to extend not only to the vessels themselves, but also to the officers, engineers, crew, machinery, and everything which the contractors are bound to provide.

13. The days and hours of departure and arrival at each port are to be fixed by the Postmaster General, and may be altered from time to time by him, on giving a notice to the contractors of three months. The Postmaster General also to have power to delay the departure of any vessel from any port for a period not exceeding 24 hours.

14. The Postmaster General to have power, on giving reasonable notice, to require the contractors to perform the service contracted for fortnightly, instead of twice in each calendar month, and in such case, the payments to be made to the contractors, and the abatements to be made by them to be increased by one-twelfth.

15. The Postmaster General to be at liberty otherwise to modify the service to be performed on giving reasonable notice to the contractors; the additional amount to be paid or deducted for any alteration, to be settled by agreement, or failing that, by arbitration in the usual manner.

16. The contractors to provide at their sole cost, to the satisfaction of the Postmaster General, a separate and convenient place of deposit for the mails on board each vessel, with secure lock and key.

17. In the event of the Postmaster General requiring it, a sorting-room for the purpose of sorting and making up the mails to be also provided, to the satisfaction of the Postmaster General, on board each vessel. The actual cost of erecting the sorting-room, and of providing the necessary furniture, lamps, &c., will be defrayed by the Postmaster General, but the furniture and lamps must be cleansed and kept in repair, and oil for the lamps must be supplied at the cost of the contractors. The services of the crew must also be given in the conveyance of the mails between the mail-room and the sorting-room.

18. Proper accommodation and mess to be provided, free of expense, for an officer of the Royal Navy in charge of the mails, and also, if required, for his servant. The Postmaster General to have power to substitute for a naval officer and his servant, a civil officer of the Post Office to take charge of the mails, and to be employed in sorting them, together with a servant. These officers, whether naval or civil, to be allowed to remain on board whilst the packet stays at all the ports to or from which the mails are conveyed. The naval or civil officers in charge of the mails to be victualled and otherwise treated as chief cabin passengers, and servants as fore-cabin passengers. The Postmaster General further to have power to require the contractors to convey, if necessary, either one or two additional civil officers of the Post Office to be employed in sorting the mails. The passage-money of these additional officers to be paid (in full of all charge for mess) at half the rates charged for ordinary passengers of a similar description.

19. The mails shall be conveyed in the vessels, and be delivered and received at each of the places to which the vessels are to proceed in the performance of the contract; and, at each port or place where the mails are to be delivered and received, the officer having charge of them shall, whenever and as often as by him deemed practicable or necessary, be conveyed on shore, and also from the shore to the vessel employed in the performance of the contract, together with, or if necessary for the performance of the duties of such officer, without Her Majesty's mails, in a suitable and seaworthy boat of not less than four oars, to be furnished with effectual covering for the mail bags, and to be provided and properly manned and equipped by the contractors.

20. Should the Postmaster General deem it expedient to place the said mails or any part thereof in charge of the master or commander of any of the said vessels, the said master or commander shall take charge of the same and make the usual Post Office oath or declaration, and furnish such journal, returns, and information, and perform such services, as the Postmaster General or his officers may require, and be responsible for the due receipt and delivery of such mails.

21. The contractors must not receive, or permit to be received on board any of the vessels employed under the contract, any letters for conveyance other than those duly in charge of the mail officer, or which are or may be privileged by law; the said mail officer will have to report any default in this respect, and in case of any such default, the contractors will be liable to be proceeded against for a breach of the contract,

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22. The whole postage of all mails conveyed in the vessels employed under the contract is to be at the disposal of Her Majesty's Postmaster General.

23. The contractors and all commanding and other officers of the vessel to be employed in the performance of the contract, and all agents, seamen, and servants of the contractors, shall at all times during the continuance of the contract punctually attend to the orders and directions of the Postmaster General, or of any of his officers or agents, as to the mode, time, and place of embarking and disembarking mails: and, for the purpose of embarking and disembarking mails at Bombay, the contractors must, if required by the Postmaster General, provide a steam tug.

24. Every sum of money stipulated to be forfeited by the contractors shall be considered as stipulated or ascertained damages, and shall be deducted by the Postmaster General out of any monies then payable or which may thereafter become payable to the contractors; or the payment thereof may be enforced, with full costs of suit, at the discretion of the Postmaster General.

25. The contractors shall, when and as often as, in writing, they or the masters of their respective vessels shall be required so to do by the Postmaster General, or by any officer or agent acting under his authority (such writing to specify the rank or description of the person or persons to be conveyed, and the accommodation to be provided for him or them), receive on board each of the vessels to be employed in the performance of the contract (in addition to the officers authorised to have the charge of the mails) any naval, military, or civil officers in the service of Her Majesty, not exceeding eight, and also their wives and children, as chief cabin passengers; and any non-commissioned or warrant officers, not exceeding four, and also their wives and children, as fore-cabin passengers; and any number of seamen, marines, or soldiers in Her Majesty's service, not exceeding 10, and their wives and children, as deck passengers; to be effectually protected from sun, rain, and bad weather; due notice being given (if practicable) to the agent of the contractors at the port of embarkation of such officers respectively and others being required to be conveyed.

26. The contractors must also undertake to convey any additional number of naval, military, and civil officers in the service of Her Majesty, not exceeding 10 in any one ship, with or without their wives and children, as chief-cabin passengers, and any additional number of non-commissioned and warrant officers, not exceeding six in any one ship, with or without their wives and children, as fore-cabin passengers, together with the servants of both chief and fore-cabin passengers, on the Postmaster General, his agents or officers, giving to the contractors or their agents at the port of embarkation the following notice, that is to say, in respect of passengers proceeding on the voyage from Aden to Bombay between the months of August and March, both inclusive, two calendar months, and at any other period of the year two weeks; and in respect of passengers proceeding on the voyage from Bombay to Aden between the months of December and May, both inclusive, two calendar months, and at any other period of the year two weeks. The passage-money for all passengers to be conveyed on the requisition of the Postmaster General, to be paid (in full of all charge for mess) at the rates charged for ordinary passengers of a similar description.

27. When a passage has been ordered for any person at the expense of the Government, the payment will be made only on the production of the order for the passage, and a certificate from the person in the following form, viz.:—

"I hereby certify that on the _____ I embarked at _____ as a passenger on board the Mail Steam Packet _____ for passage to _____ and landed at _____ on the _____."

To this certificate, the following addition is to be made in every case of a male cabin passenger, viz.:—

"I further certify that the first dinner meal taken on board, was on the _____ and the last dinner meal on the _____"

"Dated this _____ day of _____"

And the correctness of the dates must be corroborated by the master of the packet, adding underneath the passenger's signature,—

"The dates inserted in this certificate are correct."

(Signature)

"Master of the Packet."

28. The passage-money for the wives and families of officers will be paid to the contractors by the officers themselves.

29. Whenever the contractors shall be required to convey any soldiers as deck passengers, other than those specially provided for by the contract, the contractors must provide them with adequate protection from rain, sun, and bad weather, such protection to include sufficient shelter on deck.

30. The contractors shall receive on board each of the vessels employed in the performance of the contract, and convey at the lowest rate of freight charged by the contractors for private goods any number of small packages containing astronomical instruments, charts, wearing apparel, medicines, or other articles, and convey and deliver the same to, from, and between all or any of the ports or places to or from which the mails are to be conveyed, in performance of the contract, when so directed by the Postmaster General, or his agents, or by the British naval officer in command of the station, and shall also receive on board each of the vessels, and convey and deliver to, from, and between all or any of the said ports or places, any naval or other stores not exceeding ten tons in weight, at any one time, in any one

one vessel, on receiving from the Postmaster General, or any of his officers or agents, two days' previous notice of the intention to have such stores so conveyed; and the said contractors shall in all cases be strictly responsible for the due custody and safe delivery of the packages, articles, and stores.

31. The contract not to be terminable except on a notice of two years and a half; and the contractors to state what abatement they will make from the subsidy if the contract be made certain for five years, and what abatement if it be made certain for seven years.

32. The contract will not be binding until it has lain upon the table of the House of Commons for one month, without disapproval, unless, previous to the lapse of that period, it has been approved of by a resolution of the House.

33. Payments will be made quarterly out of monies to be provided by Parliament, on the production by the contractors, from time to time, to the Receiver and Accountant-General of the Post Office, of certificates from the proper officers that the contract has been strictly and punctually performed, subject to the amount of penalties and other sums (if any) being thereout deducted.

34. The Government shall at any time during the continuance of the contract, in case of great public emergency, have power to purchase all or any of the vessels at a valuation, or to charter the same exclusively for Her Majesty's service; the valuation or rate of hire to be agreed on by the Admiralty and the contractors, or, failing such agreement, by arbitration in the usual manner.

35. In case of any such purchase or hire, the contractors shall be at liberty either to terminate the contract, or, if they can provide other vessels in proper time, to continue it; or, with the consent of the Postmaster General, and on such terms as may be agreed upon, they may continue to perform part only of the contract.

36. The contractors must not assign, underlet, or dispose of the contract; or any part thereof, without the consent in writing of the Postmaster General.

37. In case of any great or habitual breach of the contract, the Postmaster General may terminate it without previous notice, and this without giving the contractors any claim to compensation.

38. In pursuance of the provisions of the Act 22 Geo. 3, c. 45, no Member of the House of Commons can be admitted to any share or part of the contract, or to any benefit to arise therefrom.

39. The contractors to be bound with two responsible sureties, to be named in their tenders, in the penalty of 10,000 *l.*, for the due fulfilment of the contract; and they must furnish the names of persons of whom inquiry can be made as to the responsibility of the sureties proposed.

40. The Postmaster General does not engage to accept the lowest tender, irrespective of other considerations, or, indeed, to accept any tender.

Enclosure 2, in No. 18.

CONTRACT for the Conveyance of Her Majesty's Mails between *Aden* and *Bombay*.

General Post Office, April 1862.

HER Majesty's Postmaster General hereby gives notice, that on Wednesday the 15th October next, at one o'clock, he will be ready to receive tenders from such persons as may be willing to contract for the conveyance of Her Majesty's mails between *Aden* and *Bombay*, twice a month.

No tender will be received after one o'clock on the day above-mentioned, nor any entertained unless made on the printed form provided for the purpose, which may be obtained on application; personal or written, at the General Post Office.

Every tender must be addressed to the Secretary of the Post Office, and must bear in the left hand corner of the envelope the words, "Tender for the Conveyance of Mails between *Aden* and *Bombay*."

No. 19.

Mr. *Merivale* to the Secretary to the Post Office.

Sir,

India Office, S.W., 16th May 1862.

WITH reference to your letter of the 17th ultimo, I am directed by the Secretary of State for India in Council to inform you that the copies of the form of tender, with the advertisement to be issued in this country, transmitted in your letter relating to the proposed additional mail service between *Aden* and *Bombay*, were forwarded to *Calcutta* and *Bombay* with the requisite instructions respecting the transmission to this country of the tenders for the service which may be received in consequence.

I am, &c.

The Secretary, General Post Office.

(signed) *Herman Merivale*.

App. No. 1.

No. 20.

The Postmaster General to the Treasury.

My Lords,

General Post Office, 3rd November 1862.

WITH reference to your letter of the 14th January last, authorising me to advertise for tenders for the conveyance of mails, twice a month, between Aden and Bombay, and to inquire of the Peninsular and Oriental Steam Navigation Company what reduction they would make in the amount of their subsidy, supposing the Calcutta packet from Suez were not required to go beyond Point-de-Galle, I have the honour to inform your Lordships that this course has been adopted with the following result.

In reply to the inquiry addressed to the Peninsular and Oriental Steam Navigation Company, the directors stated, in a letter dated the 3rd February 1862,* copy of which is inclosed, that, inasmuch as it was absolutely necessary that their steamers from Suez should go on to Madras and Calcutta as at present, whether they carried mails or not, they were unable to agree to any abatement in the amount of the subsidy, in consideration of a modification such as that proposed of the mail service.

Tenders were then called for, both in this country and in India, for the additional service between Aden and Bombay, and I transmit for the consideration of your Lordships the only tender received.

This tender comes from the British and Eastern Steam Navigation Company (Limited), who offer to perform the service at the speed named in the printed form of tender for the sum of 40,000 *l.* a year, or at a lower rate of speed for 35,000 *l.* a year; and to agree to an abatement of 2,000 *l.* a year, if the penalties for delay are not absolute, of 2,000 *l.* a year, if a contract be entered into for five years, and of 3,000 *l.* if the contract be for seven years.

As the acceptance of this offer would, under the refusal of the Peninsular and Oriental Company to submit to any reduction, entail a large additional expenditure on the country, and as the Indian packet service is already attended with a heavy loss, I apprehend that your Lordships will proceed no further in the matter at present. I am not prepared, under present circumstances, to recommend the conclusion of a contract on such terms.

No tender was sent in by the Peninsular and Oriental Steam Navigation Company, but I received a letter from that company stating that they found difficulties in making an offer in the form, and under the conditions prescribed, though they have made, under certain conditions, an informal offer to perform the service for 67,980 *l.* a year, and as this letter contains observations relative to the engagements between the Government and the company, which I think should be brought to the knowledge of your Lordships, I transmit a copy of it and of its enclosure herewith.

In order to place the Indian service in a position in which more money can properly be expended upon it, and to admit of the service to Bombay being made weekly, when a good opportunity presents itself, I recommend that your Lordships should authorise me to consult the Indian Government on the expediency of raising the postage between this country and India from 6 *d.* the $\frac{1}{2}$ oz. letter to 1 *s.*; the Inland rates to be, as at present, viz., 1 *d.* for the United Kingdom, and 1 *d.* for India, and the remaining 10 *d.* to be considered as sea postage.

The effect of a similar alteration in the postage to China, Hong Kong, Singapore, and Penang, has been nearly to double the amount of sea postage, and if, as is probable, a corresponding increase should take place in the amount of Indian postage, a very important step will have been taken towards rendering the whole Indian packet service self-supporting.

I have, &c.

The Lords Commissioners of the Treasury.

(signed) Stanley of Alderley

Enclosure 1, in No. 20.

British and Eastern Steam Navigation Company (Limited),
150, Leadenhall-street, London, E.C., 15 October 1862.

Sir,

WE beg to submit herewith a tender for the conveyance of Her Majesty's Mails between Bombay and Aden, and, in conformity with the permission given in the foot note, beg to offer the following suggestions:

1st. That in the event of our tender being accepted for the conveyance of mails between Bombay and Aden, we be permitted to continue the service on to Suez for a further sum of 10,000 *l.* per annum; this would avoid an extra transshipment of mails, and would make the delivery of them at their proper time more certain, not being dependent upon the arrival of another steamer at Aden to pick up these mails.

2ndly. That should the Government deem it desirable to open up a communication with the eastern part of India, *viâ* Beypore, we would be prepared to continue the service to that port for a further sum of 10,000 *l.* per annum.

It is contemplated to extend operations to China and Australia, and thus additional, if not competitive, postal services could be afforded to those places; but the fact of one company

company monopolising the whole of the subsidies in those seas acts obstructively to all competition, as the public will not believe that an unsubsidized company can compete successfully with one so highly subsidized as the Peninsular and Oriental Steam Navigation Company, and the overland route is thus virtually closed to all others desirous of adding to the facilities of communication between this country and the East.

It appears that, under the existing arrangements of subsidies, the Government is a considerable loser on all over-sea postal services; and we would submit whether it would not be worth the consideration of the Postmaster General to pay for the postal service by a fixed sum per letter, to be conveyed in steam ships approved of by him, and the remuneration per letter to be in proportion to the despatch with which the service is performed, the dates of the vessels sailing, &c. to be regulated by the Postmaster General. If thought desirable, we should be happy to wait on the Postmaster General, or any person he might depute, to explain more fully our views on the subject.

With reference to the dates mentioned in the tender, on which the vessels are to be ready for survey and for sea, we beg to state they are calculated on the basis of the tender being immediately accepted; should there be any delay in the confirmation by the House of Commons of the acceptance of the tender, a corresponding period must be allowed.

We are, &c.

(signed) *W. Dicey.*
Edwd. A. Smith.
J. R. Abbott.
Robert Saunders.

Enclosure 2, in No. 20.

**TENDER for Steam Vessels for Conveying Her Majesty's Mails between
*Aden and Bombay.***

Sir,

WE hereby offer to convey Her Majesty's Mails twice in each calendar month, each way, between Aden and Bombay, by a sufficient number of steam vessels of adequate power, to be approved of by the Postmaster General, for the sum of 40,000 *l.* per annum, subject to the several conditions marked A.

We will engage to provide, whenever required by Her Majesty's Government, a branch packet from Bombay to Kurrachee and back, to travel at the rate of 10 nautical miles per hour for the additional sum of 9,000 *l.* per annum, or in all, 49,000 *l.* per annum.

Provided we be allowed 190 hours, instead of 165 hours, for the voyage between Aden and Bombay, under ordinary circumstances, and 290 hours, instead of 261 hours, for the voyage westward during the prevalence of the south-west monsoon, we will perform the service between Aden and Bombay twice a month for the sum of 35,000 *l.* per annum.

When the space required for holding the Mails shall exceed 100 cubic tons measurement, we stipulate that an additional payment of 240 *l.* per annum shall be made to us for each cubic ton over and above 100 tons.

We will agree to an abatement of 2,000 *l.* in the amount of the subsidy, on condition that the penalties for delay, instead of being absolute, shall not be payable when it is proved to the satisfaction of the Postmaster General that the delay has arisen from causes beyond our control.

If the contract be made for five years certain, we will agree to an abatement of 2,000 *l.* from the subsidy demanded; and if the contract be made for seven years certain, we will agree to an abatement of 3,000 *l.* from the subsidy.

We propose as our sureties in the penalty of 10,000 *l.*, Mr. A. Leslie, of Gateshead, and Mr. James H. Wolff, of Southampton; and we refer you to the Union Bank of Newcastle, for Mr. Leslie, and the Hampshire Banking Company, for Mr. Wolff, as persons of whom inquiry can be made as to the responsibility of such sureties.

In the event of the tender being accepted, we engage that the vessels shall be ready for survey on the 12th August 1863, in failure of which we agree to pay to Her Majesty the sum of 10 *l.* from the day on which the vessels ought to have been ready for survey for every day during which they shall not be ready for such survey. And we further engage that such vessels shall be complete for sea on the 12th September 1863, in failure of which we agree to pay to Her Majesty the sum of 10 *l.* from the day on which the vessels ought to have been complete for sea for every day during which they shall not be complete for sea.

And we hereby agree to commence the said service on the 1st January 1864, and in the event of such service not being commenced on such day, we hereby agree to pay to Her Majesty the sum of 100 *l.* for every day from that day until the said service shall be commenced by us.

And we further hereby agree that such respective sums of 10 *l.*, 10 *l.*, and 100 *l.*, are to be considered not as penalties, but as liquidated damages, and payable whether any damage shall or shall not be sustained by reason of all or any one or more of such failures; or, in the event of any one or more of such failures, the Postmaster General shall have the option of determining any agreement for such service by us.

App. No. 1.

And we do hereby agree to execute a contract according to the said conditions marked A., and for the performance of the said service.

We are, &c.

(signed) *W. Dacey,*
Edwd. A. Smith,
J. R. Abbott,
Robt. Saunders,

Directors of British and Eastern Steam Navigation Company (Limited),
150, Leadenhall-street, London.

15 October 1862.

The Secretary of the Post office.

N.B.—All tenders to be made upon this printed form, and they are to be addressed to the Secretary of the Post Office, with the words “Tender for the Conveyance of Mails between Bombay and Aden” in the left-hand corner of the envelope, and no tender will be received unless it be made precisely according to the preceding printed form.

Any conditions or alterations which the parties tendering may wish to suggest must be furnished in a separate letter at the time of making the tender.

CONDITIONS of the TENDERS to be received for a Contract for the Conveyance of Her Majesty's Mails between *Aden* and *Bombay*.

(Referred to as marked A.)

1. The service of conveying Her Majesty's mails from Aden to Bombay and back to be performed twice in each calendar month.

2. The parties tendering to state the additional sum demanded, if the contractors provided a branch packet to ply between Bombay and Kurrachee. The tender to state the rate of speed proposed to be maintained by the branch packet.

3. It must be stated in the tender when the parties tendering will be ready to commence the service.

4. Under the term “Her Majesty's Mails,” are comprehended all boxes, bags, or packets of letters, newspapers, books, or printed papers, and every other article sent by the post, to whatever country or place they may be addressed, or in whatever country or place they may have originated; and also all empty bags, empty boxes, and other stores and articles used or to be used in carrying on the Post Office service, which shall be sent by, or to, or from the Post Office. Nevertheless, when the space required for holding the mails (*see* par. 16) shall exceed 100 cubic tons measurement, the contractors shall be allowed an additional payment per annum for each cubic ton, the amount of which must form part of the tender.

5. The tenders must provide for the mails being conveyed between Aden and Bombay in 165 hours, except during the prevalence of the south-west monsoon, when 261 hours will be allowed for the voyage westward, viz., from Bombay to Aden. But the parties tendering may also state upon what terms they would perform the service in a greater or less number of hours.

6. A premium of 50 *l.* will be given for every complete day of 24 hours which the time occupied in any voyage, between Aden and Bombay, may be less than that allowed under the contract.

7. A penalty of 500 *l.* to be incurred when the contractors fail in providing a vessel, in accordance with their contract, ready to put to sea at the appointed time, and also the sum of 500 *l.* for every successive day which shall elapse after such appointed time; and a penalty of 100 *l.* for every complete day consumed on the voyage between Aden and Bombay, from whatever cause arising, beyond the number of days allowed: but so that the full amount of any penalties for delay on any one voyage shall never exceed the portion of the subsidy applicable to such voyage. The payment by the contractors of any penalties shall in no way prejudice the right of the Postmaster General to treat the failure to provide a proper vessel at the appointed time, or to perform a voyage at or within the appointed time, as a breach of the contract.

8. The parties tendering may state what abatement in the amount of the subsidy they would make on condition that the penalties for delay instead of being absolute, shall not be payable when it is proved to the satisfaction of the Postmaster General that the delay has arisen from causes beyond the control of the contractors.

9. The contractors must engage to supply, during the continuance of the contract, and to the satisfaction of the Postmaster General, a sufficient number of steam vessels of adequate power and in all respects suited for the performance of the service within the time stipulated in the tender.

10. The Postmaster General to have power to require that the vessels to be used for the purposes of the contract shall be built on plans previously approved of by him or by the Lords of the Admiralty.

11. The vessels to be always supplied with all necessary and proper machinery, engines, apparel, furniture, stores, tackle, boats, fuel, oil, tallow, provisions, anchors, cables, fire-pumps and other proper means for extinguishing fire, lightning conductors, charts, chronometers,

nometers, proper nautical instruments, and whatsoever else may be necessary for equipping the said vessels and rendering them constantly efficient for the service to be performed; and to be manned with legally qualified and competent officers and a sufficient crew of able seamen and other men. A medical officer, to be approved of by the Postmaster-General, to be provided on board each packet, and who shall give medical attendance, medicines, and medicaments gratis to all persons conveyed under the contract, or whose passage-money may be paid for in whole or in part by the Government.

12. The vessels are to be subject at all times to survey by officers in the employment of the Admiralty, and any defect discovered on such survey to be immediately made good by the contractors. This survey to extend not only to the vessels themselves, but also to the officers, engineers, crew, machinery, and everything which the contractors are bound to provide.

13. The days and hours of departure and arrival at each port are to be fixed by the Postmaster-General, and may be altered from time to time by him on giving a notice to the contractors of three months. The Postmaster-General also to have power to delay the departure of any vessel from any port for a period not exceeding 24 hours.

14. The Postmaster General to have power, on giving reasonable notice, to require the contractors to perform the service contracted for fortnightly, instead of twice in each calendar month, and in such case, the payments to be made to the contractors, and the abatements to be made by them to be increased by one-twelfth.

15. The Postmaster General to be at liberty otherwise to modify the service to be performed on giving reasonable notice to the contractors; the additional amount to be paid or deducted for any alteration, to be settled by agreement, or failing that, by arbitration in the usual manner.

16. The contractors to provide at their sole cost, to the satisfaction of the Postmaster General, a separate and convenient place of deposit for the mails on board each vessel, with secure lock and key.

17. In the event of the Postmaster General requiring it, a sorting-room for the purpose of sorting and making up the mails to be also provided, to the satisfaction of the Postmaster General, on board each vessel. The actual cost of erecting the sorting-room, and of providing the necessary furniture, lamps, &c., will be defrayed by the Postmaster General, but the furniture and lamps must be cleansed and kept in repair, and oil for the lamps must be supplied at the cost of the contractors. The services of the crew must also be given in the conveyance of the mails between the mail-room and the sorting-room.

18. Proper accommodation and mess to be provided, free of expense, for an officer of the Royal Navy in charge of the mails, and also, if required, for his servant. The Postmaster General to have power to substitute for a naval officer and his servant, a civil officer of the Post Office to take charge of the mails, and to be employed in sorting them, together with a servant. These officers, whether naval or civil, to be allowed to remain on board whilst the packet stays at all the ports to or from which the mails are conveyed. The naval or civil officers in charge of the mails to be victualled and otherwise treated as chief cabin passengers, and servants as fore cabin passengers. The Postmaster General further to have power to require the contractors to convey, if necessary, either one or two additional civil officers of the Post Office to be employed in sorting the mails. The passage money of these additional officers to be paid (in full of all charge for mess) at half the rates charged for ordinary passengers of a similar description.

19. The mails shall be conveyed in the vessels, and be delivered and received at each of the places to which the vessels are to proceed in the performance of the contract; and, at each port or place where the mails are to be delivered and received, the officer having charge of them shall, whenever and as often as by him deemed practicable or necessary, be conveyed on shore, and also from the shore to the vessel employed in the performance of the contract, together with, or if necessary for the performance of the duties of such officer, without Her Majesty's mails, in a suitable and seaworthy boat of not less than four oars, to be furnished with effectual covering for the mail bags, and to be provided and properly manned and equipped by the contractors.

20. Should the Postmaster General deem it expedient to place the said mails or any part thereof in charge of the master or commander of any of the said vessels, the said master or commander shall take charge of the same and make the usual Post Office oath or declaration, and furnish such journal, returns and information, and perform such services, as the Postmaster General or his officers may require, and be responsible for the due receipt and delivery of such mails.

21. The contractors must not receive, or permit to be received on board any of the vessels employed under the contract, any letters for conveyance other than those duly in charge of the mail officer, or which are or may be privileged by law; the said mail officer will have to report any default in this respect, and in case of any such default, the contractors will be liable to be proceeded against for a breach of the contract.

22. The whole postage of all mails conveyed in the vessels employed under the contract is to be at the disposal of Her Majesty's Postmaster General.

23. The contractors and all commanding and other officers of the vessels to be employed in the performance of the contract, and all agents, seamen, and servants of the contractors, shall at all times during the continuance of the contract, punctually attend to the orders and directions of the Postmaster General, or of any of his officers or agents, as to the mode, time, and place of embarking and disembarking mails; and, for the purpose of embarking and disembarking mails at Bombay, the contractors must, if required by the Postmaster General, provide a steam-tug.

App. No. 1.

24. Every sum of money stipulated to be forfeited by the contractors shall be considered as stipulated or ascertained damages, and shall be deducted by the Postmaster General out of any monies then payable or which may thereafter become payable to the contractors, or the payment thereof may be enforced, with full costs of suit, at the discretion of the Postmaster General.

25. The contractors shall, when and as often as in writing they or the masters of their respective vessels shall be required so to do by the Postmaster General, or by any officer or agent acting under his authority (such writing to specify the rank or description of the person or persons to be conveyed, and the accommodation to be provided for him or them), receive on board each of the vessels to be employed in the performance of the contract (in addition to the officers authorised to have the charge of the mails,) any naval, military, and civil officers in the service of Her Majesty, not exceeding eight, and also their wives and children, as chief-cabin passengers, and any non-commissioned or warrant officers, not exceeding four, and also their wives and children, as fore-cabin passengers, and any number of seamen, marines, or soldiers in Her Majesty's service, not exceeding ten, and their wives and children, as deck passengers, to be effectually protected from sun, rain, and bad weather; due notice being given (if practicable) to the agent of the contractors at the port of embarkation of such officers respectively and others being required to be conveyed.

26. The contractors must also undertake to convey any additional number of naval, military, and civil officers in the service of Her Majesty, not exceeding ten in any one ship, with or without their wives and children, as chief cabin passengers, and any additional number of non-commissioned and warrant officers, not exceeding six in any one ship, with or without their wives and children, as fore-cabin passengers, together with the servants of both chief and fore-cabin passengers, on the Postmaster General, his agents or officers, giving to the contractors or their agents at the port of embarkation the following notice, that is to say, in respect of passengers proceeding on the voyage from Aden to Bombay, between the months of August and March, both inclusive, two calendar months, and at any other period of the year two weeks; and in respect of passengers proceeding on the voyage from Bombay to Aden between the months of December and May, both inclusive, two calendar months, and at any other period of the year two weeks. The passage money for all passengers to be conveyed on the requisition of the Postmaster General, to be paid (in full of all charge for mess) at the rates charged for ordinary passengers of a similar description.

27. When a passage has been ordered for any person at the expense of the Government, the payment will be made only on the production of the order for the passage, and a certificate from the person in the following form, viz.:—

“I hereby certify that on the _____ I embarked at _____ as a
passenger on board the Mail steam packet _____ for passage to
and landed at _____ on the _____.”

To this certificate the following addition is to be made in every case of a male cabin passenger, viz.:—

“I further certify that the first dinner meal taken on board was on the _____
and the last dinner meal on the _____.”

“Dated this _____ day of _____.”

And the correctness of the dates must be corroborated by the master of the packet, adding underneath the passengers signature,—

“The dates inserted in this certificate are correct.”

(Signature)

“Master of the Packet.”

28. The passage-money for the wives and families of officers will be paid to the contractors by the officers themselves.

29. Whenever the contractors shall be required to convey any soldiers as deck passengers, other than those specially provided for by the contract, the contractors must provide them with adequate protection from rain, sun, and bad weather, such protection to include sufficient shelter on deck.

30. The contractors shall receive on board each of the vessels employed in the performance of the contract, and convey at the lowest rate of freight charged by the contractors for private goods, any number of small packages containing astronomical instruments, charts, wearing apparel, medicines, or other articles, and convey and deliver the same to, from, and between all or any of the ports or places to or from which the mails are to be conveyed, in performance of the contract, when so directed by the Postmaster General, or his agents, or by the British naval officer in command of the station, and shall also receive on board each of the vessels, and convey and deliver to, from, and between all or any of the said ports or places, any naval or other stores not exceeding 10 tons in weight, at any one time, in any one vessel, on receiving from the Postmaster General, or any of his officers or agents, two days' previous notice of the intention to have such stores so conveyed; and the said contractors shall in all cases be strictly responsible for the due custody and safe delivery of the packages, articles, and stores.

31. The contract not to be terminable except on a notice of two years and a half; and the contractors to state what abatement they will make from the subsidy if the contract be made certain for five years, and what abatement if it be made certain for seven years.

32. The

32. The contract will not be binding until it has lain upon the Table of the House of Commons for one month, without disapproval, unless, previous to the lapse of that period, it has been approved of by a Resolution of the House.

33. Payments will be made quarterly out of monies to be provided by Parliament, on the production by the contractors, from time to time, to the Receiver and Accountant General of the Post Office, of certificates from the proper officers that the contract has been strictly and punctually performed, subject to the amount of penalties and other sums (if any) being thereout deducted.

34. The Government shall at any time during the continuance of the contract, in case of great public emergency, have power to purchase all or any of the vessels at a valuation, or to charter the same exclusively for Her Majesty's service; the valuation or rate of hire to be agreed on by the Admiralty and the contractors, or, failing such agreement, by arbitration in the usual manner.

35. In case of any such purchase or hire, the contractors shall be at liberty either to terminate the contract, or, if they can provide other vessels in proper time, to continue it; or, with the consent of the Postmaster General, and on such terms as may be agreed upon, they may continue to perform part only of the contract.

36. The contractors must not assign, underlet, or dispose of the contract, or any part thereof, without the consent in writing of the Postmaster General.

37. In case of any great or habitual breach of the contract, the Postmaster General may terminate it without previous notice, and this without giving the contractors any claim to compensation.

38. In pursuance of the provisions of the Act 22 Geo. 3, c. 45, no Member of the House of Commons can be admitted to any share or part of the contract, or to any benefit to arise therefrom.

39. The contractors to be bound with two responsible sureties, to be named in their tenders, in the penalty of 10,000 *l.* for the due fulfilment of the contract; and they must furnish the names of persons of whom inquiry can be made as to the responsibility of the sureties proposed.

40. The Postmaster General does not engage to accept the lowest tender, irrespective of other considerations, or indeed to accept any tender.

Enclosure 3, in No. 20.

Peninsular and Oriental Steam Navigation Company,
Offices, 122, Leadenhall-street, London, E.C.,
15 October 1862.

Sir,

WITH reference to the advertisement issued some months since, inviting tenders to be addressed to you for establishing a twice-a-month postal communication between Aden and Bombay, I am instructed by the Board of Directors of the Peninsular and Oriental Steam Navigation Company to state that they find difficulties in making a tender in the precise terms of the printed form, or under the printed conditions, prescribed. For an explanation of these difficulties I beg to refer you to the accompanying document, marked A.

The Board, therefore, direct me to state that they are willing, on behalf of the Company, to convey Her Majesty's mails twice in each calendar month each way between Aden and Bombay by a sufficient number (not exceeding three) of steam vessels of adequate power, to be approved by the Postmaster General, for the sum of 67,980 *l.*, being at the rate of 17 *s.* 2 *d.* per mile; and that if 200 hours instead of 165 hours for the voyage between Aden and Bombay under ordinary circumstances, and 300 hours instead of 261 hours for the voyage westward during the prevalence of the south-west monsoon, be allowed, they will perform the said service for 60,000 *l.* per annum.

They will also provide a steamer tug for landing and embarking mails at Bombay, if required, for an additional sum of 2,000 *l.* per annum. And they will execute the contract for the performance of this service under the printed conditions issued, with the exception of those numbered 4, 7, 9, 13, 31, and 37, which they will require to be modified as follows:—

Condition No. 4. A space not exceeding 20 cubic tons to be set apart for a mail-room, all tonnage beyond that required by the Post Office to be paid for at the rate of 10 *l.* per cubic ton for conveyance to Bombay, and 20 *l.* per cubic ton homewards from Bombay; such rates of freight to include through conveyance from and to Southampton and Marseilles. Fourteen days' notice to be given to the Company's agent at Bombay of the extra space required.

Condition No. 7. The penalties not to be enforced when it can be shown that the delay has arisen from causes beyond the control of the contractors.

Condition No. 9. Three vessels to be defined "a sufficient number."

Condition No. 13. The alteration of the days and hours of departure and arrival not to be such as to require the services of more than three vessels.

Condition No. 31. No reduction can be made for an extended term, and an option to be reserved to the Company to determine the contract, on giving 12 months' notice.

Condition No. 37. With reference to this and other conditions, the Directors will require a clause in the contract similar to that in the contract for the Australian service, for referring any dispute or controversy to arbitration.

The Directors will be prepared to commence the service six months after the confirmation of the contract by the House of Commons.

App. No. 1.

I am further instructed to state that, should the Postmaster General require a contract to be executed according to the whole of the printed conditions referred to, the Directors will do so in consideration of a sum of 60,000 £. per annum, in addition to that above stated, being paid to the Company.

The Directors do not make any tender in respect to a branch packet to ply between Bombay and Kurrachee, understanding that the service has already been contracted for by a local Company.

The Secretary of the
General Post Office.

I have, &c.
(signed) C. W. Howell, Secretary.

Enclosure 4, in No. 20.

(A.)

Peninsular and Oriental Steam Navigation Company,
Offices, 122, Leadenhall-street, London, E.C.

EXTRACT from the Minutes of the Board of Directors of the Peninsular and Oriental Steam Navigation Company, 26 September 1862.

"REFERENCE having been made to the advertisement issued by the Post Office some months since, inviting tenders (to be lodged on the 15th October proximo) for an additional semi-monthly postal service between Bombay and Aden, and to the conditions on which such tenders are to be submitted, it was resolved—

"That the matter be referred in the first instance to the Committee of Management to consider and make an early report thereon to the Board for its guidance in making any tender for the execution of that service."

Pursuant to the foregoing Resolution, the Report of the Committee of Management was laid before the Board of Directors on the 3d, and adopted by them on the 10th October.

(signed) C. W. Howell, Secretary,
Peninsular and Oriental Steam Navigation Company.

Enclosure 5, in No. 20.

Peninsular and Oriental Steam Navigation Company,
Offices, 122, Leadenhall-street, London, E.C.,
10 October 1862.

Report from the Committee of Management.—Bombay and Aden Contract.

THE Committee of Management having, in pursuance of the Board's minute of the 26th September, carefully examined and considered the printed form of tender and conditions under which the Post Office has invited tenders for an additional semi-monthly postal service between Bombay and Aden, beg to report thereon as follows:—

The Conditions.

These contain several stipulations of a novel and very stringent character not hitherto required in postal contracts, at least not in the contracts under which this Company have undertaken and conducted the extensive postal service with which it has been charged for a period of upwards of 25 years.

Clause 4. Defines the term "Her Majesty's mails" to comprehend "all boxes, bags, or packages of letters, newspapers, books, or printed papers, and every other article sent by the post to whatever country or place they may be addressed, or in whatever country or place they may have originated; and also all empty bags, empty boxes, and other stores and articles used, or to be used, in carrying on the Post Office service, which shall be sent by, or to, or from the Post Office." This is a latitude of interpretation given to the term "Her Majesty's mails" not hitherto adopted, and when coupled with the condition that a space equal to 100 cubic tons shall be reserved for "Her Majesty's mails," and that such space is to be "provided in a separate and convenient place of deposit for the mails on board each vessel, with secure lock and key" (see Clause 16), it deserves the consideration of the Board, as such a space so separated and reserved would nearly exclude the carriage of goods on freight.

But a more serious question is involved in the stipulation referred to, whether this additional line may be undertaken by this Company or other parties; namely, how is this large bulk of articles called mails, to the extent of 100 cubic tons, if required, to be conveyed from Southampton and Marseilles to Aden, and from Aden homewards to those places? The only means at present existing is that afforded by this Company's steamers running on the Calcutta and China lines, with which this proposed extra line to Bombay is to be connected; and if the Company are to be required to provide space for, and convey to and from Aden, all the mails, &c. destined for these Bombay steamers outwards, and to reserve sufficient space in the Calcutta steamers homewards, to enable them to receive this amount of
tonnage

tonnage of mails, &c. at Aden (in addition to the great bulk of mails from India, China, and Australia, with which the mail-rooms of the Calcutta steamers are always filled), that arrangement would deprive the Company of an amount of freight earnings which could not be compensated for at less than about 70,000 £. per annum.

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Reduction of Subsidy for Reduced Speed.

Clause 5. If a rate of eight knots, instead of 10, be adopted, a sum of 6,000 £. may be allowed for saving of expense of fuel and wear and tear of ship and machinery.

Clause 7. Imposes heavy penalties for failure to provide vessels ready for sea at appointed times; also for not performing voyages within the contract time; these penalties to be absolute, that is, without any allowance for circumstances arising from causes beyond the control of the contractors, the only limitation to the amount being a sum corresponding to the proportion of the subsidy for the voyage. It also gives a right to the Postmaster General over and above the imposition of the penalties to treat the failures as a breach of the contract, investing him consequently with the power either to levy the whole penalty of 10,000 £. for non-fulfilment of the contract, or to determine it without compensation.

Such arbitrary conditions cannot, the Committee submit, be admitted without great danger to the Company, or, if admitted, a larger addition to the ordinary cost of the service should be stipulated for as an indemnification for the risk.

Number of Vessels to be provided.

Clause 9. Stipulates that the contractors must supply, to the satisfaction of the Postmaster General, a sufficient number of steam vessels. The Committee suggest that the number should be defined, as in the Company's other contracts, otherwise a Postmaster General might insist that the Company should be prepared with an indefinite number of vessels to meet all accidents, whenever they might occur. Three vessels would be sufficient for the efficient performance of the contemplated service under all ordinary circumstances.

Alteration of Days and Hours of Departure and Arrival.

Clause 13. Such alteration must not necessitate the employment of a larger number of vessels than that limited.

Alteration of Service from a Twice-a-Month to a Fortnightly one.

Clause 14. An addition of one-twelfth to the subsidy might not be a sufficient compensation for this alteration, as an extra ship might be required to keep up the proper times of arrival and departure at Aden and Bombay.

A Steam Tug to be provided for Landing and Embarking the Mails, if required.

Clause 23. There is no wharf at Bombay at which a steam tug can be. The annual cost of such a tug would not be less than 2,000 £.

Term of the Contract.

Clause 31. Parties tendering are requested to state what abatement they will make if the term be extended from two years and a-half to five or seven years. The Committee cannot advise the Board to bind the Company to any extended term; on the contrary, they deem it advisable that the Company should have the option of determining the contract for this branch service concurrently with any notice which it may become necessary to give for determining the existing contracts for the India and China postal service.

Such an option, they submit, is essential, because they feel that the time is not distant when, for the protection of the interests of their constituents, the Directors may be compelled to require a revision of the India and China postal contracts, with a view to an increase of the remuneration for that service, or, failing in that object, to abandon it.

In support of this opinion the Committee beg to claim the attention of the Board to the following facts and circumstances:—

1st. To the obvious fact that the cost to the public of a postal service must always depend on the amount of freight and passenger traffic which can be combined with it. In illustration of this the Committee need only refer to the history of the Company's connection with the India postal service. That service was commenced about 20 years since, at a rate of subsidy of 20 s. per mile. With such a rate and with new vessels, requiring very little outlay for repairs, it was with some difficulty that a dividend of 7 per cent. could be afforded to the shareholders, because there was then but little freight and passenger traffic on the line. The Directors gave their strenuous attention to the development of a freight and passenger traffic, and, as that increased, the public reaped the benefit in a decrease of the cost of the postal service, inasmuch that the mileage rate has been from time to time reduced from 20 s. to its present rate of only 4 s. 6 d.

It is necessary, in reference to this low rate, to bear in mind that the contract for it was obtained in the face of a severe competition, encouraged by the Government of that day, who divided the service into a number of sections, inviting parties of comparatively small means to tender for it; and that the result was that the tender of this Company for the whole service required was found to be 86,400 £. per annum below that of any other competitor, as stated by the then Chancellor of the Exchequer in his place in the House of Commons.

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It follows, therefore, that looking to the shortest time at which their contract can be terminated, the public will have realised a saving of not less than one million sterling by the terms on which the Company undertook the service as compared with what other parties required for it.

2ndly. On a former occasion it will be in the recollection of the Board that the Committee of Management submitted certain data to show that these postal-service contracts caused such an increase in the working expenses of the Company, and so fettered it in making arrangements for increasing the freight and passenger traffic, that the receipts for the postal service did not afford an adequate compensation for their drawbacks.

The Committee do not deem it necessary to recapitulate those details, and will therefore only advert to the cost of the India and China lines, and the proportion of that cost contributed by the postal service. The total earnings of the Company on those lines for the last 12 months amounted to 1,850,000 £. which was only sufficient to cover the expenses of the lines, and yield a moderate dividend to the shareholders. Of that sum 1,600,000 £. was derived from freight and passenger traffic, and only 250,000 £. from the postal service.

Now, the Committee feel warranted in asserting that if they had been at liberty to arrange the movements of the Company's vessels in the most advantageous manner for meeting the requirements of the freight and passenger traffic, and at the same time for reducing their working expenses, and had had also available for that traffic the tonnage now set apart for mail-rooms, sorting-rooms, and the cabins occupied by postal agents and their servants, and had also been relieved from the cost of their maintenance, an amount of expense would have been saved, and an amount of increase of freight and passage money obtained to an extent which would have improved the financial position of the Company. Independently of these considerations, however, a circumstance has occurred which requires the gravest attention of the Board in reference to the measures adverted to by the Committee.

A line of steamers under the direct support of the French Government, and subsidized to an amount five times that of the mileage rate received by this Company, is on the point of commencement to run between Suez and India and China, and must of course come into competition with this Company on its most important lines of traffic.

Without desiring to exaggerate the effect of these French lines on the position of this Company, it cannot be concealed that they will deprive it of a portion of that commercial, say freight, and passenger traffic, which has enabled it to perform the postal service hitherto at so low a rate; and that if that service is to be continued in the hands of this Company, an augmentation of the payment for it, in some proportion to the anticipated diminution of freight and passenger traffic, must be made, otherwise it will be better for the Company to be relieved from it, and to meet the competition with their hands free.

In closing these observations the Committee deem it not irrelevant to remark, that although the Company have been always ready to meet, and have met, the competition of private enterprise without seeking or receiving any adventitious support, they consider that when it has to encounter the competition of a powerful and wealthy foreign government, it is entitled to some consideration from its own Government, and that the important public service which it has for so many years satisfactorily executed, with other important collateral services rendered on urgent national occasions, ought not to be forgotten, and cannot in justice be overlooked.

Commencement of the Service.

As the contract will not be binding until it has lain upon the Table of the House of Commons for one month without disapproval, unless previous to the lapse of that period it has been approved of by a Resolution of the House (*see* Clause 32), any commencement of the service should only be fixed for a reasonable time subsequent to such confirmation.

Sureties.

Clause 39. It is presumed that individual sureties, to be responsible for a penalty of 10,000 £., is a requirement not intended to be applicable to an incorporated Company like this, possessing nearly three millions of unencumbered property.

Cost of the Service.

In estimating the annual sum for which the contemplated service may be undertaken, the Board will bear in mind that, as the existing semi-monthly line is more than adequate for all the freight and passenger traffic on the Bombay route, and that even should any increase of traffic be developed by the additional line, there will be no means of through conveyance for it, as the vessels on the Calcutta line at the season when any increase may be expected on the Bombay line are generally full, and have no room at Aden either for passengers or cargo. The cost, therefore, of this additional service will have to be borne almost entirely by the postal subsidy, and in that respect the Company will be in a similar position as with the branch line between Ceylon and Australia.

(signed) *Ar. Anderson.*
Jas. Allan.
J. A. Olding.
H. Bayley.
John Ritchie.

No. 21.

Mr. *Melville* to the Secretary to the Post Office.

App. No. 1.

Sir,

India Office, 21 October 1862.

WITH reference to your letter, dated the 17th of April last, I am directed by the Secretary of State for India in Council to acquaint you, for the information of Her Majesty's Postmaster General, that the Government of India and the Government of Bombay have reported that, up to the 1st September last, the latest date allowed, no tender had been received for the performance of the mail service between Aden and Bombay, specified in the notification of Her Majesty's Postmaster General.

I am, &c.

(signed) *J. Cosmo Melville*.

The Secretary, General Post Office.

No. 22.

(17,946—13—2.)

Mr. *F. Peel*, M. P., to the Postmaster General.

My Lord,

Treasury Chambers, 16 December 1862.

I AM desired by the Lords Commissioners of Her Majesty's Treasury to state that, under the circumstances set forth in your Lordship's letter of the 3d ultimo, they are of opinion that it is not desirable to take any further steps at the present time in the matter of the additional mail service between Aden and Bombay.

I am further to state that my Lords approve of your Lordship entering into communication with the Indian authorities as to the expediency of raising the postage between this country and India, from the present rate of 6 *d.* to 1 *s.* the half-ounce letter.

I have, &c.

(signed) *F. Peel*.The Postmaster General,
&c. &c. &c.

No. 23.

Mr. *Hill* to Mr. *Merivale*.

Sir,

General Post Office, 8 January 1863.

THE Lords of Her Majesty's Treasury have, no doubt, communicated to Sir Charles Wood the result of the advertisements which were issued in April last in this country and in India, calling for tenders for additional mail service between Aden and Bombay, and the opinion come to by their Lordships, that it was not desirable at the present time to take any further steps in this matter.

In forwarding to the Treasury the only tender sent in for this additional line of packets, the Postmaster General recommended that, in order to place the Indian packet service in a position in which more money could properly be expended upon it, and to admit of the line to Bombay being made weekly when a good opportunity shall present itself, the Indian Government should be consulted on the expediency of raising the postage between this country and India generally from 6 *d.* the half-ounce letter to 1 *s.*, the inland rates to be as at present, viz., 1 *d.* for the United Kingdom and 1 *d.* for India, and the remaining 10 *d.* to be considered as sea postage.

Lord Stanley of Alderley pointed out to their Lordships that the result of a similar alteration in the postage to China, Hong Kong, Singapore, and Penang, made in August 1861, had been nearly to double the amount of sea postage, and that if, as is probable, a corresponding increase should take place in the amount of sea postage on the Indian correspondence, a very important step would have been taken towards rendering the whole Indian packet service self-supporting.

Their Lordships have accordingly authorised Lord Stanley to place himself in communication with Sir Charles Wood on this subject, with the view of ascertaining how far the Government of India are prepared to concur in such an increase of postage.

His Lordship desires me to add, that experience has shown that the rate of 6 *d.* is generally too low for letters carried by packet over long distances by sea, and it is intended on the 1st April next to increase the postage on letters between this country and the West Indies from 6 *d.* to 1 *s.* per half-ounce letter.

In connection with this alteration in the packet rate, I am further to propose a rearrangement of the scale for charging postage upon letters above one ounce in weight transmitted between the United Kingdom and India. At present such letters are charged according to the scale of weight in use with regard to British Inland letters, viz. :—

Letters not exceeding $\frac{1}{2}$ oz.	-	-	-	-	-	-	-	-	1 rate.
„ above $\frac{1}{2}$ oz. and not exceeding 1 oz.	-	-	-	-	-	-	-	-	2 rates.
„ above 1 oz. but not exceeding 2 oz.	-	-	-	-	-	-	-	-	4 rates.

And so on, two additional rates being charged for each additional ounce.

By this scale a letter exceeding one ounce, even to the smallest extent, is chargeable with four rates the same as a letter just within the weight of two ounces.

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With respect to Inland letters this is of little importance, the postage being very low; but as regards letters going abroad the case is different. Thus, if the single rate of postage to the East Indies be raised to 1 s., the least addition to a letter weighing one ounce would, by the present scale, subject the letter to an additional postage of 2 s.

To prevent so sudden and large an increase of postage, which may be made a ground of complaint, it is proposed that, when the postage to the East Indies is altered, a scale of weight be adopted having half an ounce as an unit throughout the postage, to advance by single rates.

On this plan, a letter sent by packet, and weighing more than 1 oz., but under $1\frac{1}{2}$ oz., would be liable to a postage of 3 s. instead of 4 s.; and if exceeding 2 ozs., but under $2\frac{1}{2}$ ozs., to a postage of 5 s. instead of 6 s., and so on.

Such an alteration, while it would affect only a comparatively small number of letters, and could not therefore entail much loss of revenue, would be an extension of a principle already adopted in the correspondence between this country and France, Italy, Spain, and Portugal, viz., that of advancing throughout the scale of charge by single rates of postage, and on the 1st of April next, a similar alteration will be made in the scale of postage to the West Indies.

It would be very desirable, if the Indian Government acquiesce in the arrangements now proposed, to carry them into operation also on the 1st of April next.

Herman Merivale, Esq., c. b.,
India Office.

I am, &c.
(signed) *F. Hill.*

No. 24.

Mr. *F. Hill* to Mr. *Merivale*.

Sir,

General Post Office, 9 January 1863.

REFERRING to my letter of the 8th instant, I am directed by the Postmaster General to request that, in any communication which Sir Charles Wood may make to the Government of India upon the proposal to raise the single rate of postage for letters between this country and India from 6 d. to 1 s., and to alter the scale of weight for charging such letters, he will be good enough to state that it is not intended to alter the regulation which now exists of forwarding unpaid and insufficiently paid letters, charged with the fine of a single rate in addition to the ordinary postage, further than to make the fine in such cases 1 s. instead of 6 d., as at present.

Herman Merivale, Esq., c. b.,
India Office.

(signed) *F. Hill.*

No. 25.

Mr. *Merivale* to the Secretary to the Post Office.

Sir,

India Office, S.W., 31 January 1863.

I HAVE laid before the Secretary of State for India in Council Mr. Frederick Hill's letters, dated the 8th and 9th instant, bringing under consideration the question of an increase in the rate of postage between this country and India, principally as being likely to afford the means of introducing various improvements into the postal arrangements between the two countries, and as tending to make the whole India postal service self-supporting.

In reply, I am directed to state that Sir Charles Wood cannot express any opinion on this proposal without previous communication with the Government of India. He has accordingly forwarded a copy of Mr. F. Hill's letter to that Government, and will acquaint you with the result of the reference, and with the decision to which he may ultimately come, at the earliest possible period.

The Secretary, General Post Office.

I am, &c.,
(signed) *Herman Merivale.*

No. 26.

Mr. *F. Hill* to Mr. *Merivale*.

Sir,

General Post Office, 4 May 1863.

I AM directed by the Postmaster General to request that you will draw the attention of the Secretary of State for India in Council to the letter which I had the honour, by desire of his Lordship, to address to you on the 8th January 1863, bringing under consideration the question of raising the rate of postage on letters between this country and India from 6 d. to 1 s. the half-ounce letter.

In

In reply to that letter, Sir Charles Wood stated that he would refer the question for the consideration of the Government of India, and would communicate the result to the Postmaster General, but up to this time nothing further has been heard on the subject.

As Sir Charles Wood is probably aware, a very general desire has recently been expressed that the mails for India, instead of being dispatched four times in each calendar month, should be dispatched weekly, and should be made up in London on a fixed day in each week, so as to obviate the inconvenience now experienced when the regular day of dispatch falls on Sunday.

A similar proposal had previously been made by the India Post Office, and, irrespective of these applications, the change has long been desired by this department for the sake both of the public and of its own convenience, but the Postmaster General has been deterred from recommending the alteration from the consideration that it would entail a large additional expense, from 30,000*l.* to 40,000*l.* a year, whereas even now the service is attended with a heavy loss.

Under the circumstances Lord Stanley of Alderley regards it as indispensable that the change in question should, if it be made, be accompanied with the increase in postage, recommended in my letter of January 1863, above referred to, but, if this increase be consented to, his Lordship believes, owing to the reduced cost at which, in consequence of the increased traffic with India, such a measure could now be effected, that it will be practicable not merely to have a weekly mail to India generally, but a weekly mail to Bombay, an improvement which, as Sir Charles Wood is aware, has, for some years, been earnestly desired by the Indian Government.

I am accordingly desired to request that Sir Charles Wood will endeavour to obtain the assent of the Indian Government to such augmentation without further delay, in order that the Postmaster General may be in a position to make these important alterations as soon as possible.

The change to a weekly mail the Packet Company state they could make on a notice of about two months; and Lord Stanley has reason to hope that, in a few months from this time, a weekly mail to Bombay might be established.

(signed) *F. Hill.*

Herman Merivale, Esq., C. B.,
India Office.

No. 27.

Mr. *F. Hill* to Mr. *Howell*.

Sir,

General Post Office, 30 January 1865.

THE Directors of the Peninsular and Oriental Steam Navigation Company have no doubt seen in the "Times" newspaper a copy of a memorial addressed to the Postmaster General, and dated the 11th inst., urging a change in the arrangements for dispatching from London the East India, China, and Australian mails.

Instead of the present system, under which four mails are dispatched in each month, on fixed days of the month, the memorialists suggest that the mails for India should be made up on some fixed day in each week, the China mails being sent away by each alternate dispatch, and the Australian mails by every fourth dispatch.

The Postmaster General would be glad if the Directors would consider this suggestion and would furnish him with their observations upon it, at the same time stating how far the change would render necessary an increase in the amount now paid to the Peninsular and Oriental Company on account of these several mail services.

It would be of assistance in the consideration of the matter if the Directors would cause two *pro formâ* time tables to be prepared, showing the arrivals and departures throughout, from London to Sydney and back, one table being constructed on the assumption that the service between Point de Galle and Sydney is every fourth week, and the other that that service is performed in every alternate week.

(signed) *F. Hill.*

C. W. Howell, Esq.,
Peninsular and Oriental Steam Navigation Company.

No. 28.

Mr. *Cooper* to the Postmaster General.

3, Brown's Buildings, Liverpool,
14 February 1865.

My Lord,

I AM instructed by the Liverpool East India and China Association respectfully, to draw your Lordship's attention to the advisability of having a fixed day in the week for the dispatch of the overland mails for India and China *via* Marseilles, this arrangement being more suitable to the habits and requirements of men of business than the present plan, which involves some uncertainty, especially when the usual date falls on a Sunday.

The proposal conveyed in the memorial of the 11th of January from several London firms, viz., that the mails should be dispatched from London on the evening of each Friday, seems, in the opinion of this association, to be one which is most likely to meet the convenience of Government and to suit the interests of the commercial community, and consequently

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this association instructs me to support the prayer of the aforesaid petition, and to express the hope that your Lordship will be able to give the matter your early and favourable consideration.

I am, &c.
(signed) *J. B. Cooper*, Secretary.

To the Right Honourable the Lord Stanley of Alderley,
Her Majesty's Postmaster General.

No. 29.

Mr. *F. Hill* to Mr. *Cooper*.

Sir,

General Post Office, 18 February 1865.

I AM directed by the Postmaster General to acknowledge the receipt of your letter of the 14th instant, in which you state that the Liverpool East India and China Association recommend the substitution of a weekly mail to India, China, &c., for the existing mail four times a month, and refer to the memorial on this subject which was forwarded to this department on the 20th ultimo, and I am to acquaint you, in reply, that this matter is under his Lordship's consideration.

J. B. Cooper, Esq.

I am, &c.
(signed) *F. Hill*.

No. 30.

Mr. *Howell* to the Secretary to the Post Office.

Peninsular and Oriental Steam Navigation Company,
Offices, 122, Leadenhall-street, London, E.C.,
18 February 1865.

Sir,

I HAVE the honour, by order of the Directors, to acknowledge the receipt of your letter of the 30th ultimo (No. 97 Q.), with reference to a memorial which has recently been addressed to the Postmaster General, suggesting that instead of the present system under which four overland mails are dispatched in each calendar month, they should be made up on some fixed day, say Friday, in each week.

In compliance with his Lordship's wishes the Directors have given their careful consideration to this question, and they have caused the accompanying *pro formâ* time tables to be prepared for his guidance.

It appears to the Directors that, as far as regards the India and China services, the suggested alteration could be carried into effect without much trouble or preparation, and that the departures from, and arrivals at, the terminal ports, and the ports of junction, would accord entirely with the weekly system. They have not, however, been able to devise any scheme by which the plan could be made to work satisfactorily in respect to the communication with the Australian Colonies.

The extra service which would be entailed upon the Company under the suggested arrangement would be equivalent to one-twelfth of the present annual mileage (1,236,048), say 103,004 miles, and although it is doubtful whether the revenue from passage money and freight would increase in proportion to the extra work to be performed, the Directors would be willing to undertake it as an experiment at the existing mileage rate, say for 35,024 *l* per annum, subject to the conditions stated in the last paragraph of this letter.

It will be observed, upon reference to the accompanying *pro formâ* time tables for the Ceylon and Sydney line, that the effect of the proposed alteration would be to reduce the stay of the steamers at Sydney from 38 to 15 days, and to prolong their stay at Point de Galle from 5 to 21 days.

As the vessels have, in order to maintain the contract speed, to be docked at Sydney every voyage, the Directors are doubtful whether a stay of 15 days would be sufficient for that purpose, and for effecting the needful repairs and refit; and they further apprehend that the result of lying 21 days in Galle Harbour, where the bottoms of ships become foul perhaps more rapidly than in any other waters in the east, would be to retard them considerably on the downward voyage, and thus to diminish the shortened stay at Sydney allowed in the time table.

Under these circumstances the Directors must contemplate the necessity of placing a fourth steamer upon the line, involving an additional expense of about 35,000 *l* per annum, which would of course be chargeable to the public, and should this become requisite, or should the additional receipts from freight and passage money prove inadequate to the extra work to be performed, the Directors reserve to themselves the right of claiming the restoration of the present system, or a revision and modification of the scheme as regards the amount of subsidy to be paid for it, upon giving due notice to Her Majesty's Postmaster General.

I have, &c.
(signed) *C. W. Howell*, Secretary.

To the Secretary of the General Post Office.

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PRO FORMÂ TIME TABLE.—CEYLON AND SYDNEY LINE.

A Service every second week performed by Six Steamers.

	Leave Galle.	Arrive at		Interval for Replies at		Leave		Arrive at Galle.	Mail arrives in London <i>via</i> Marseilles.	Course of Post with London.	Interval for Replies in London.
		Melbourne.	Sydney.	Sydney.	Melbourne.	Sydney.	Melbourne.				
Friday.	Wednesday.	Monday.	Friday.	Days.	Days.	Saturday.	Wednesday.	Wednesday.	Monday.	Days.	Days.
Jan. -	31 January	19 Feb. -	23 Feb. -	15	23	10 March	14 March -	4 April -	30 April -	115	11
Jan. -	14 Feb. -	5 March	9 March	15	23	24 March	28 March -	18 April -	14 May -	115	11
Feb. -	28 Feb. -	19 March	23 March	15	23	7 April -	11 April -	2 May -	28 May -	115	11
Feb. -	14 March -	2 April -	6 April -	15	23	21 April -	25 April -	16 May -	11 June -	115	11
March -	28 March -	16 April -	20 April -	15	23	5 May -	9 May -	30 May -	25 June -	115	11
March -	11 April -	30 April -	4 May -	15	23	19 May -	23 May -	13 June -	9 July -	115	11
March -	25 April -	14 May -	18 May -	15	23	2 June -	6 June -	27 June -	23 July -	115	11
April -	9 May -	28 May -	1 June -	15	23	16 June -	20 June -	11 July -	6 Aug. -	115	11
April -	23 May -	11 June -	15 June -	15	23	30 June -	4 July -	25 July -	20 Aug. -	115	11
May -	6 June -	25 June -	29 June -	15	23	14 July -	18 July -	8 August -	3 Sept. -	115	11
May -	20 June -	9 July -	13 July -	15	23	28 July -	1 August -	22 August -	17 Sept. -	115	11
June -	4 July -	23 July -	27 July -	15	23	11 Aug. -	15 August -	5 Sept. -	1 Oct. -	115	11
June -	18 July -	6 Aug. -	10 Aug. -	15	23	25 Aug. -	29 August -	19 Sept. -	15 Oct. -	115	11
July -	1 August -	20 Aug. -	24 Aug. -	15	23	8 Sept. -	12 Sept. -	3 October -	29 Oct. -	115	11
July -	15 August -	3 Sept. -	7 Sept. -	15	23	22 Sept. -	26 Sept. -	17 October -	12 Nov. -	115	11
August -	29 August -	17 Sept. -	21 Sept. -	15	23	6 Oct. -	10 October -	31 October -	26 Nov. -	115	11
August -	12 Sept. -	1 Oct. -	5 Oct. -	15	23	20 Oct. -	24 October -	14 Nov. -	10 Dec. -	115	11
August -	26 Sept. -	15 Oct. -	19 Oct. -	15	23	3 Nov. -	7 Nov. -	28 Nov. -	24 Dec. -	115	11
Sept. -	10 October -	29 Oct. -	2 Nov. -	15	23	17 Nov. -	21 Nov. -	12 Dec. -	7 Jan. -	115	11
Sept. -	24 October -	12 Nov. -	16 Nov. -	15	23	1 Dec. -	5 Dec. -	26 Dec. -	21 Jan. -	115	11
Oct. -	7 Nov. -	26 Nov. -	30 Nov. -	15	23	15 Dec. -	19 Dec. -	9 January -	4 Feb. -	115	11
Oct. -	21 Nov. -	10 Dec. -	14 Dec. -	15	23	29 Dec. -	2 January -	23 January -	18 Feb. -	115	11
Nov. -	5 Dec. -	24 Dec. -	28 Dec. -	15	23	12 Jan. -	16 January -	6 Feb. -	4 March -	115	11
Nov. -	19 Dec. -	7 Jan. -	11 Jan. -	15	23	26 Jan. -	30 January -	20 Feb. -	18 March -	115	11
Dec. -	2 January	21 Jan. -	25 Jan. -	15	23	9 Feb. -	13 Feb. -	6 March -	1 April -	115	11
Dec. -	16 January	4 Feb. -	8 Feb. -	15	23	23 Feb. -	27 Feb. -	20 March -	15 April -	115	11

Enclosure 2, in No. 30.

PRO FORMÂ TIME TABLE.—CEYLON AND SYDNEY LINE.

A Service every fourth week performed by Six Steamers.

	Leave Galle.	Arrive at		Interval for Replies at		Leave		Arrive at Galle.	Mail arrives in London <i>via</i> Marseilles.	Course of Post with London.	Interval for Replies in London.
		Melbourne.	Sydney.	Sydney.	Melbourne.	Sydney.	Melbourne.				
Friday.	Wednesday.	Monday.	Friday.	Days.	Days.	Saturday.	Wednesday.	Wednesday.	Monday.	Days.	Days.
Jan. -	31 Jan. -	19 Feb. -	23 Feb. -	15	23	10 March	14 March -	4 April -	30 April -	115	25
Feb. -	28 Feb. -	19 March	23 March	15	23	7 April -	11 April -	2 May -	28 May -	115	25
March -	28 March -	16 April -	20 April -	15	23	5 May -	9 May -	30 May -	25 June -	115	25
March -	25 April -	14 May -	18 May -	15	23	2 June -	6 June -	27 June -	23 July -	115	25
April -	23 May -	11 June -	15 June -	15	23	30 June -	4 July -	25 July -	20 Aug. -	115	25
May -	20 June -	9 July -	13 July -	15	23	28 July -	1 Aug. -	22 Aug. -	17 Sept. -	115	25
June -	18 July -	6 Aug. -	10 Aug. -	15	23	25 Aug. -	29 Aug. -	19 Sept. -	15 Oct. -	115	25
June -	15 Aug. -	3 Sept. -	7 Sept. -	15	23	22 Sept. -	26 Sept. -	17 Oct. -	12 Nov. -	115	25
July -	12 Sept. -	1 Oct. -	5 Oct. -	15	23	20 Oct. -	34 Oct. -	14 Nov. -	10 Dec. -	115	25
Sept. -	10 Oct. -	29 Oct. -	2 Nov. -	15	23	17 Nov. -	21 Nov. -	12 Dec. -	7 Jan. -	115	25
Sept. -	7 Nov. -	26 Nov. -	30 Nov. -	15	23	15 Dec. -	19 Dec. -	9 Jan. -	4 Feb. -	115	25
Nov. -	5 Dec. -	24 Dec. -	28 Dec. -	15	23	12 Jan. -	16 Jan. -	6 Feb. -	4 March -	115	25
Dec. -	2 Jan. -	21 Jan. -	25 Jan. -	15	23	9 Feb. -	13 Feb. -	6 March -	1 April -	115	25

Note.—Under the existing time table—The steamers stay at Sydney - - 38 days as against 15 under the proposed re-arrangement.
The interval for replies at Melbourne - 16 " " 23 " "
Ditto - ditto - Sydney - 8 " " 15 " "
The steamers stay at Galle - - 5 " " 21 " "
The course of post with London is - 109 " " 115 " "
The interval for replies in London is - 13 " " 25 " "

February 1860.

App. No. 1.

No. 31.

MEMORIAL to the Postmaster General from Merchants, Bankers, and others at Madras.

My Lord,

Madras, 21 March 1865.

WE, the undersigned merchants, bankers, and others resident in Madras, and having business connections with various parts of Europe, have learned with deep interest that a memorial has been presented to your Lordship by the leading firms in London engaged in the trade with the East, suggesting that the eastern mails shall be dispatched from London once a week instead of four times a month, and that the time fixed for the weekly dispatch shall be Friday evening.

In the reasons given by the London memorialists for the desired alteration we entirely concur, and we look upon it not in the light of a mere addition to the number of mails dispatched annually, but rather as likely to add materially to the value of the advices conveyed to us by each mail.

A corresponding weekly dispatch from India would, of course, be the complement of this arrangement, and your memorialists trust that the day of departure from Calcutta would be so fixed as to avert the possibility of the steamer's stay of 24 hours at Madras falling on Sunday.

Your memorialists desire to commend the proposal to your Lordship's favourable consideration, and to express their conviction that its adoption would call forth the gratitude not only of the commercial community, but also of all European residents who have ties of kindred or friendship with the land of their birth.

We have, &c.

[Here follow the signatures.]

To the Right Honourable Lord Stanley of Alderley,
Her Majesty's Postmaster General, London.

No. 32.

Mr. Cooper to the Postmaster General.

My Lord,

3, Brown's Buildings, Liverpool, 8 May 1865.

YOUR Lordship's letter of the 18th February (No. 6539), in reply to the memorial of the East India and China Association of the 14th February was duly laid before the Committee, since which period no announcement has been made either in public or private that your Lordship had arrived at any decision in the matter of the dispatch of the outward mails for India every Friday instead of four times per month.

I am therefore instructed again respectfully to draw your Lordship's attention to the subject, in the hope that your Lordship will favourably entertain and sanction the proposed alteration.

I am further instructed to impress upon your Lordship the fact that whilst there is only a bi-monthly mail to Bombay there is a weekly one to and from Calcutta, but that in consequence of the greater time occupied by the Calcutta or direct line the letters sent by that route arrive little, if at all, before those by the subsequent Bombay mail, while the homeward direct mail is dispatched from Calcutta sometimes on the same day as that on which what would be the succeeding mail *viâ* Bombay leaves, making the accommodation little better than a bi-monthly mail.

I am consequently directed to convey to your Lordship the earnest prayer of this Association that the mails for India be dispatched every Friday from London, that the advantage of a weekly mail be extended to Bombay, and that, for the sake of greater dispatch, the entire Indian correspondence pass through Bombay.

I have, &c.

(signed) J. B. Cooper, Secretary.

To the Right Honourable Lord Stanley of Alderley,
Her Majesty's Postmaster General.

No. 33.

Mr. F. Hill to Mr. Merivale.

Sir,

General Post Office, 4 May 1865.

I AM directed by the Postmaster General to request that you will draw the attention of the Secretary of State for India in Council to the letter which I had the honour, by desire of his Lordship, to address to you on the 8th January 1863, bringing under consideration the question of raising the rate of postage on letters, between this country and India, from 6 *d.* to 1 *s.* the half-ounce letter.

In

In reply to that letter, Sir Charles Wood stated that he would refer the question for the consideration of the Government of India, and would communicate the result to the Postmaster General; but up to this time nothing further has been heard on the subject.

As Sir Charles Wood is probably aware, a very general desire has recently been expressed that the mails for India, instead of being dispatched four times in each calendar month, should be dispatched weekly, and should be made up in London on a fixed day in each week, so as to obviate the inconvenience now experienced when the regular day of dispatch falls on Sunday.

A similar proposal had previously been made by the India Post Office, and, irrespective of these applications, has long been desired by this Department, for the sake both of the public and of its own convenience; but the Postmaster General has been deterred from recommending the alteration from the consideration that it would entail a large additional expense (from 30,000*l.* to 40,000*l.* a year), whereas, even now the service is attended with a heavy loss.

Under the circumstances, Lord Stanley of Alderley regards it as indispensable that the change in question should, if it be made, be accompanied with the increase in postage recommended in my letter of January 1863, above referred to; but, if this increase be consented to, his Lordship believes, owing to the reduced cost at which, in consequence of the increased traffic with India, such a measure could now be effected, that it will be practicable, not merely to have a weekly mail to India generally, but a weekly mail to Bombay, an improvement which, as Sir Charles Wood is aware, has for some years been earnestly desired by the Indian Government.

I am accordingly desired to request that Sir Charles Wood will endeavour to obtain the assent of the Indian Government to such augmentation without further delay, in order that the Postmaster General may be in a position to make these important alterations as soon as possible.

The change to a weekly mail, the Packet Company state they could make on a notice of about two months, and Lord Stanley has reason to hope that, in a few months from this time, a weekly mail to Bombay might be established.

Herman Merivale, Esq., C.B.,
&c. &c. &c.
India Office.

I am, &c.
(signed) *F. Hill.*

No. 34.

Mr. *F. Hill* to Mr. *Cooper*.

Sir,

General Post Office, 22 May 1865.

In acknowledging the receipt of your further letter of the 8th instant, I am directed by the Postmaster General to inform you that, before coming to any decision upon the question of dispatching the mails for the East Indies from London on the evening of every Friday, instead of four times in each month, many inquiries were necessary, and some of them are not yet completed.

The arrangement is one which would certainly be advantageous to the public, and convenient to this Department; but hitherto the Postmaster General has been deterred from adopting it owing to the large additional expense which it would cause in a service already entailing a heavy loss.

His Lordship, however, has now hopes from the successful result of an increase of postage to some other distant countries and colonies, that by the adoption of a similar measure in the case of India, not only may the present packet service be made weekly, but additional packets may be subsidised, so as to obtain a weekly service to Bombay.

J. B. Cooper, Esq.,
East India and China Association, Liverpool.

I am, &c.
(signed) *F. Hill.*

No. 35.

Mr. *Merivale* to the Secretary to the Post Office.

Sir,

India Office, S.W., 27 May 1865.

I am directed by the Secretary of State for India in Council to transmit to you the accompanying memorial, addressed by the members of the Bombay Chamber of Commerce to Her Majesty's Postmaster General, and forwarded to this office by the Government of Bombay for favourable consideration, relative to the establishment of a weekly mail service between England and Bombay.

The Secretary, General Post Office.

I am, &c.
(signed) *Herman Merivale.*

App. No. 1.

Enclosure in No. 35.

MEMORIAL to the Postmaster General from the Chamber of Commerce, Bombay.

To the Right Honourable Lord *Stanley of Alderley*, Her Majesty's Postmaster General.

The Memorial of the Members of the Bombay Chamber of Commerce,

Respectfully sheweth,

THAT the Bombay Chamber of Commerce has learned with deep interest and satisfaction that the principal merchants and bankers of London having trading and monetary relations with India and the East, have addressed a memorial to your Lordship praying for the establishment of a weekly mail to India on regular fixed days of the week, and pointing out Friday as the day which, for all mercantile and general purposes, would be found most convenient.

2. That the reasons set forth in the London memorial, for the establishment of a weekly mail to India on a fixed day of the week, have the entire concurrence of the Chamber, and they earnestly hope that it may be in your Lordship's power, in furtherance of the great interests concerned, to comply with the suggestion and the wishes of the memorialists at an early date.

3. That the reasons given in the London memorial for a weekly mail to India on a fixed day of the week, apply with equal force in support of the establishment of a weekly mail to England from this side of India.

4. That the want of weekly mail communication from Bombay to England has been long felt, and the recent completion of telegraphic communication between India and England *viâ* the Persian Gulf, has now made more frequent means of postal communication with England than at present exist from Bombay—a first necessity for the satisfactory transaction of mercantile business.

5. That the geographical position of Bombay, its proximity to Europe as compared with the other presidency towns, and the conveyance of the leading Indian lines of railway now rapidly tending towards completion, all point to it as the fitting *entrepôt* for weekly postal communication between India and Europe.

Your memorialists, in supporting the London memorial, and asking for the complement of the same by praying for the establishment of a corresponding weekly dispatch of mails from Bombay, desire in conclusion to say that the evening of Thursday, or the morning of Friday, would be the most convenient time of dispatch for the mercantile community of this place.

And your memorialists will ever pray.

Bombay Chamber of Commerce,
April 1865.

[Here follow the signatures.]

No. 36.

Mr. *F. Hill* to Messrs. *Arbuthnot & Co.*

Gentlemen,

General Post Office, 30 May 1865.

I AM directed by the Postmaster General to acknowledge the receipt of the letter signed by yourselves and others, in which you recommend the substitution of a weekly mail to India, China, &c., for the existing mail four times a month, and you refer to the memorial on this subject which has been addressed to the Postmaster General by merchants of London, and I am to inform you in reply that this matter is under his Lordship's consideration.

Messrs. *Arbuthnot & Co.*, Madras.

I am, &c.
(signed) *F. Hill.*

No. 37.

Mr. *Merivale* to the Assistant Secretary to the Post Office.

Sir,

India Office, S.W., 23 June 1865.

I HAVE laid before the Secretary of State for India in Council your letter, dated the 4th ultimo, stating that in the event of the rate of postage between India and England being raised, as formerly proposed, from 6*d.* to 1*s.* the half-ounce letter, it would, in the opinion of Her Majesty's Postmaster General be practicable, not merely to have a weekly mail to India generally, but a weekly mail to Bombay, and that Lord *Stanley of Alderley* is desirous, therefore,

therefore, that the assent of the Government of India should be obtained to the suggested increase of postage without further delay.

In reply, I am directed to express the gratification of Sir Charles Wood that there is a prospect that a fixed weekly postal communication between England and India will, in accordance with the general wish of those connected with India, be carried out at no distant period.

Sir Charles Wood has just received a letter from the Government of India, a copy of which with its enclosures is herewith forwarded for the information of Lord Stanley of Alderley, furnishing the report called for on the questions of a weekly mail communication with India *via* Bombay, and of an increase in the rates of postage.

On the first point, it will be observed that the Government of India strongly recommend that a weekly mail communication may be established between Suez and Bombay from the commencement of the ensuing year; and Sir Charles Wood does not doubt that that Government is fully justified in the confidence which it expresses, that there will be ample provision available at that time for the distribution of the mails from Bombay to all parts of India, with the requisite regularity and dispatch.

With regard to the question of the increase in the rates of postage between England and India, the Government of India, under the impression that as the measure had been relinquished as regards Australia, it would not be pressed in respect to India, has not entered on the discussion of the subject at any length.

The Government, however, though not objecting to the small increase of charge on letters *via* Marseilles, suggested as a maximum, by Mr. Riddell, refer to the hardship which the proposed increase would impose on a considerable portion of the European community in India, and to the unpopularity with which it would be received; and as the measure is, in the opinion of Sir Charles Wood, to be strongly deprecated, except on the clearest grounds of necessity, I am directed to inquire whether, in the event of the mail communication by sea between Aden and Calcutta being relinquished, it might not be practicable to carry out the plan of a weekly communication with Bombay, without that increase in the aggregate charge for the contract steamers, in consideration of which it is proposed to raise the rates of postage.

It is maintained by the Director General of the Post Office in India that this might be done, and Sir Charles Wood desires to commend the arguments urged by that gentleman to the consideration of Lord Stanley of Alderley.

I am, &c.
(signed) *Herman Merivale.*

The Assistant Secretary,
General Post Office.

Enclosure 1, in No. 37.

(Home Department, Post Office, No. 5, of 1865.)

To the Right Honourable Sir *Charles Wood*, Bart., G.C.B., Secretary of State for India.

Sir, Fort William, 17 April 1865.

REFERRING to the correspondence noted on the margin,* we forward for your consideration the accompanying communication from the Director General† of the Post Office, the Calcutta Chamber of Commerce,‡ and the Calcutta Trades Association,§ relating to the establishment of a weekly mail between England and Bombay.

* To Secretary of State	- No. 16, dated	31 August	- 1860
" "	No. 22, "	6 November	- "
" "	No. 23, "	29 "	- "
" "	No. 2, "	14 January	- 1861
From Secretary of State	- No. 11, "	31 "	- "
" "	No. 50, "	30 April	- "
To Secretary of State	- No. 12, "	28 June	- "
From Secretary of State	- No. 148, "	24 December	- "
" "	No. 90, "	8 "	- 1862
" "	No. 8, "	31 January	- 1863
" "	No. 70, "	23 December	- "
" "	No. 59, "	9 July	- 1864

† Dated 20 February 1865.

‡ Dated 4 and

21 March 1865.

§ Dated 31 March 1865.

2. We are not yet in a position to state definitely by what time railway communication will be complete between Bombay and Calcutta, or between Bombay and Madras; neither are we able to state that the roads are in such a condition throughout as to make it quite certain that it will be possible, either in the present year or in 1866, to convey the Calcutta mails throughout the whole year in mail carts over those parts of the line where the railway will remain unfinished.

3. Nevertheless, we desire strongly to recommend that measures should be now taken for establishing, from the commencement of the ensuing year, a weekly mail communication between Suez and Bombay, feeling satisfied that, even if the mails are not conveyed with perfect regularity, there will be at least as much regularity as obtains under the present system.

4. We would ask your particular attention to Mr. Riddell's remarks in paragraphs 6 to 10 of his letter. There is reason to believe that the British Indian Steam Navigation Company would not be indisposed to tender for the conveyance of mails twice a month between Suez and Bombay. But it is obvious that neither that company nor any other company, except the Peninsular and Oriental Company, can afford to tender for the conveyance of mails between Aden and Bombay only, except at such an amount as should cover nearly the entire cost of the line. We have no doubt that the new service would be very efficiently dis-

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charged by the British Indian Steam Navigation Company, which already holds several contracts under the Government of India for the conveyance of mails to Burmal, to the Persian Gulf, and other parts.

5. We would recommend, whatever arrangement be entered into, and with whatever company, that so long as the bi-monthly communication to Calcutta *viâ* Galle is continued, book packets and newspapers *viâ* Southampton, intended for Calcutta and Lower Bengal, should be sent only by that route.

6. In paragraphs 12 to 17, Mr. Riddell has discussed the proposal made by the Postmaster General of England to increase the rate of postage from 6 *d.* to 1 *s.* the half ounce. As it was, some time since, stated in the public prints that this increase had been abandoned in respect of the Australian mails, we conclude that it will not now be proposed to apply the measure to the Indian mails.

Such an increase would certainly be very unpopular, and it would, we think, bear with some hardship on a considerable class of the European community in India.

Rather than make the minimum rate of postage 1 *s.*, we should have suggested a general reduction of the weight for a single rate, and while increasing the charge for an ounce to 1 *s.* would have allowed letters not exceeding a quarter of an ounce to be carried for 6 *d.* Such a charge would, we believe, produce a considerably increased postage, while it would still enable those to whom every 6 *d.* is of consequence, to avoid the additional charge by reducing the weight of their letters. We see no objection to the smaller alteration now suggested by Mr. Riddell, in the 16th paragraph of his letter.

We have, &c.
(signed) *John Lawrence.*
H. B. Harrington.
W. Grey.
W. N. Massey.

Enclosure 2, in No. 37.

From *H. B. Riddell*, Esq., Director General of the Post Office of India, to *E. C. Bayley*, Esq., Secretary to the Government of India, No. 3247; dated 20 February 1865.

THE inconvenience of the existing arrangements for the transmission of mails between England and India has become so great that I cannot delay bringing the subject again before Government, in the hope that measures may be taken to place the mail service on a more satisfactory footing.

At present there are nominally four mails in the month to and from India, but owing to the long circuit made by those sent *viâ* Galle to Calcutta, nine-tenths of India receive the benefit of two only.

2. I give in the following table the dates on which the overland express and the ordinary overland mails *viâ* Bombay have been dispatched from Calcutta, and the dates* on which the mails for the Galle steamers have been closed in Calcutta since the 1st of December 1864:

Route.	Date of closing Mail in Calcutta.	Due in England.
Bombay, latest safe date - - -	6 December, at 6 p.m. - - -	} 5 January 1865.
Ditto, Express - - -	7 December, at 6 p.m. - - -	
Mail <i>viâ</i> Galle - - -	8 December, at 6 p.m. - - -	12 January 1865.
Bombay, latest safe date - - -	21 December, at 6 p.m. - - -	} 20 January 1865.
Ditto, Express - - -	22 December, at 6 p.m. - - -	
Mail <i>viâ</i> Galle - - -	22 December, at 6 p.m. - - -	26 January 1865.
Bombay, latest safe date - - -	6 January, at 6 p.m. - - -	} 5 February 1865.
Ditto, Express - - -	7 January, at 6 p.m. - - -	
Mail <i>viâ</i> Galle - - -	8 January, at 6 p.m. - - -	12 February 1865.
Bombay, latest safe date - - -	21 January, at 6 p.m. - - -	} 20 February 1865.
Ditto, Express - - -	22 January, at 6 p.m. - - -	
Mail <i>viâ</i> Galle - - -	22 January, at 6 p.m. - - -	26 February 1865.

It will be seen that even now letters dispatched by overland express to Bombay would, according to contract time, reach England a week before letters posted on the same or following day for transmission by the steamer *viâ* Galle. Within the last few days the Thul Ghat has been opened for traffic, and arrangements are in progress, which will make the evening mail train from Calcutta a through train to Agra. These measures will save about 15 hours between Bombay and Calcutta; and before November there is every

every prospect of the Branch Railway to Nagpore being open. There will then be a break of only 400 miles between the railroads ending at Nagpore and at Mirzapore, and the ordinary mail will be about four days and six hours in transit between Bombay and Calcutta. The progress of the Nagpore Railway has been much slower than was anticipated. I believe, however, that there is now no doubt that it will be open from Bombay to Nagpore before it is possible to make arrangements for a weekly mail communication between England and Bombay.

3. Assuming that arrangements between Aden and Bombay cannot be made before November, I have little hesitation in saying that the Post Office in India will be prepared to convey the overland mails to and from Bombay and Madras and Calcutta with dispatch and regularity. I cannot promise "perfect" regularity, but can undertake that the regularity shall be at least as perfect as that attained by the contract steamers.

4. As, therefore, the conditions required by the Right Honourable Secretary of State can be complied with as far as the conveyance of the mails in India is concerned, I venture to hope that the great boon of a weekly communication with England will not be withheld much longer.

5. It is clear that the adoption of Bombay as the port of arrival and dispatch of mails for India to or from Suez would meet the postal requirements of Calcutta more effectually than the present arrangement, while Bombay and the rest of India would have the benefit of a weekly instead of a bi-monthly mail, I would strongly urge the advantage of making arrangements for a weekly mail, *i. e.*, 52 mails a year, from each end of the line, leaving London and Bombay on a fixed day in each week. Under the present system, four mails only are dispatched at somewhat irregular intervals in each month. The greater regularity of dispatch would, I feel satisfied, have a favourable effect on the correspondence, and at the same time the establishments in India would be more regularly, and therefore more economically, employed.

6. I am anxious that it should be clearly understood that if the interests of India and of England in relation to India were alone considered, a weekly mail communication between Europe and India *via* Bombay could be established at a smaller cost than is now incurred in keeping up a bi-monthly communication with the two ports of Bombay and Calcutta.

Taking Suez as the point of departure, the mail steamers, under the existing arrangements, traverse, in the course of the year in 96 voyages, 370,848 miles. If the steamers made 104 voyages between Suez and Bombay, the distance traversed would be 309,088, that is 61,760 miles less than under existing arrangements. The Peninsular and Oriental Steam Navigation Company, it appears, are now paid for their Indian contract at the rate of 4s. per mile; at this rate the annual payment would be about (83,000 *l.*) eighty-three thousand and three hundred pounds. Allowing an addition to the mileage rate, and assuming that (5s.) five shillings a mile were given, the subsidy for 102 trips between Suez and Bombay would be (77,272 *l.*) seventy-seven thousand two hundred and seventy-two pounds.

		Miles.	Voyages.	Miles.
Suez to Calcutta	- -	4,754	× 48	= 228,192
Suez to Bombay	- -	2,972	× 48	= 142,656
TOTAL				- - - 370,848
Suez to Bombay	- -	2,972	× 104	= 309,088
Difference				- - - 61,760

7. The Peninsular and Oriental Steam Navigation Company, in an informal offer, proposed to ask (67,980 *l.*) sixty-seven thousand nine hundred and eighty pounds, for 48 trips between Aden and Bombay; that is, (1,416 *l.* 5s.) one thousand four hundred and sixteen pounds and five shillings per trip, or rather more than (2,000 rupees) two thousand a day for each day under steam. This tender is preposterously high, and I have very little doubt that arrangements could be made in India for the dispatch of two extra mails in each month from Aden or Suez and from Bombay for less than half the subsidy demanded by the Peninsular and Oriental Steam Navigation Company.

8. At first sight it would seem that it ought to cost much less to provide for the dispatch of two extra steamers in each direction between Bombay and Aden than between Bombay and Suez; but in practice it will, I believe, be found that the subsidy required for the service between Aden and Bombay will be very nearly as great as that for the longer voyage between Suez and Bombay. The reason for this will be apparent when it is considered that the branch line from Aden could not expect much freight or passenger traffic, whereas a line from Suez could ensure a fair share, both of the passengers and goods traffic between Europe and Bombay. There can be no question that two additional steamers monthly to and from Suez and Bombay would be far more convenient to passengers, and far more useful to commerce, than a branch line to and from Aden only.

9. If therefore the contract with the Peninsular and Oriental Steam Navigation Company cannot be revised so as to relieve India of the unnecessary burthen which is imposed on it in the shape of a subsidy for a postal line, which is absolutely useless to it, I would propose that arrangements should be at once made for the dispatch of two additional mails in the month from Suez to Bombay, and from Bombay to Suez. I have some reason to believe that a tender for the service may be made in India by the British India Steam Navigation Company, which has steamers in India which can be at once made available. The tenders previously made in England, and the subsidy paid to the Peninsular and Oriental Steam Navigation Company, will enable the Government to judge whether the

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tender, if made, is advantageous. The managing director is expected in Calcutta very shortly, and though I do not delay the submission of this Report, the Viceroy in Council may think it desirable to wait until about the 10th March before taking any further steps in the matter.

10. Should it be found advisable to enter into a local contract for two additional mail services in each month between Suez and Bombay, it would be, I think, desirable to limit its duration to two or three years. In the course of that time it would, I trust, be possible, both to disentangle the postal communications of India from the long sea lines required for the conveyance of mails between Suez and Ceylon, China and Australia, and to provide for the dispatch of a mail for India from London on a fixed day in each week. If this were done the China and Australia mails might be dispatched on the first and third Wednesday of each month, instead of on the present dates. The departures from Suez to Bombay corresponding to the dispatches from London on the second and fourth Wednesday would be in a Peninsular and Oriental Steam Navigation Company's steamer. The remaining dispatches would be conveyed from Suez in local steam packets.

11. Some time before November next the railroad will be completed to Brindisi. The English company, which has a subsidy from the Italian Government for the line of steamers from Ancona and Brindisi to Alexandria are, I believe, most anxious to secure the conveyance of Indian mails in order that they may be able to guarantee that their passengers will not reach Alexandria after the mail has passed on to Suez. The arrangements, however, west of Egypt are perhaps beyond my province, and I mention the Brindisi line in order that Government may see that, great as are the present facilities of communication in the Mediterranean, they will be much increased in a very few months. In fact, if the mails can be conveyed between Suez and India, there will be no difficulty in their conveyance to and from Alexandria.

12. In connection with the subject under consideration, a proposal was suggested by Lord Stanley of Alderley, Her Majesty's Postmaster General, that the rates of postage should be raised on correspondence between Great Britain and India, in order to provide funds to meet the increase of expense which will be incurred if additional mails are sent to Bombay.

13. It is my opinion, and I think that in this and in previous reports I have proved that if the postal communications between Great Britain and India were separated from the contracts for communication between Europe, China, and Australia, the additional Indian service could be performed at a less cost than the present service. If this is the case it is hard that the correspondence of India should be taxed and the rates of postage raised for the benefit of China and Australia.

14. I believe, too, that without any increase in the rates of postage there will be a large increase in the postal revenue if all India is allowed to share the benefit of a weekly communication with Europe. At present, as I have said above, although there are nominally four mails to and from India, yet practically there are but two. When there is a weekly mail to and from Bombay there will be a weekly mail to and from every post town in India; and there can be no reasonable doubt that the correspondence, though it will not be doubled, will be very largely increased, and will partially, at least, meet the expense which, under existing arrangements, will be charged on the Indian revenues.

15. If, however, an increase is absolutely necessary, it is possible, perhaps, that a modification of the present rates of postage might produce a larger revenue without exciting discontent or being felt a hardship. The present minimum charge for a letter *via* Marseilles is 10*d.* for a weight not exceeding half an ounce, above one ounce the charge is 1*s.* 8*d.* per ounce or fraction of an ounce.

16. These rates do not suit the Indian coinage, and I believe that a return to the former minimum charge of 9*d.* or 6 annas for a letter under a quarter of an ounce, and an addition of 6*d.* for every additional quarter of an ounce, would yield a considerably larger revenue, and not be felt as oppressive.

17. I would not recommend any increase to the Southampton rates of postage, but I think that the number of mails might with advantage be limited to one or at the utmost two in the month. The first mail should be dispatched from England as near the commencement of the month as possible, and would take out to India, China, and Ceylon, and Australia all the monthly magazines and periodicals; the second would, as it now is, be loaded with old newspapers and duplicate letters.

The recommendations which I have laid before the Government are briefly the following:

As the Post Office in India is prepared to undertake the distribution over India of a weekly mail sent to Bombay from England, I propose that a weekly mail should be dispatched from England to the East by Marseilles or Italy as soon as arrangements can be made; that mails *via* Southampton should not be dispatched oftener than twice in the month. That until the Indian mail service can be separated from the Ceylon, China, and Australian service, a local company should, if possible, be subsidised, so that either 48 or 52 mails annually should be dispatched to and from Suez and Bombay; that no change should be made in Southampton postage; but that the Marseilles minimum rate be reduced to 9*d.* per quarter ounce, and 6*d.* added for each additional quarter ounce.

Enclosure 3, in No. 37.

FROM *H. W. J. Wood*, Esquire, Secretary to the Bengal Chamber of Commerce, to *E. C. Bayley*, Esquire, Secretary to the Government of India; dated Calcutta, the 4th March 1865.

THE Director General of the Post Office submitted to Government in his letter, No. 2668, of 24th April 1860, a proposition for modifying the arrangements under which the postal service between England and India was then conducted.

The proposition was based on the assumption that Railway communication between Bengal and Bombay would be so far advanced in the course of two or three years that Bombay would eventually become the port of dispatch and receipt of the mails to and from Europe, and that by the establishment of a weekly mail from London the communication with Calcutta would be more rapid and regular, and obviate the necessity for maintaining the highly subsidised service *viâ* Galle.

Although the railway between the two presidencies is not complete, yet it appears to have reached the stage of advancement that, taken in conjunction with the shorter sea passage from Bombay, the dates of departure of the mails from that port, which are timed to arrive in London at intervals of a week after the direct mails of the 9th and 23rd from Calcutta, have been so much retarded, that from a weekly mail communication Calcutta is now, for a large portion of the year, practically reduced to a fortnightly communication. In proof of this I am directed to refer to the annexed statement, showing the dates of departure of the mails *viâ* Bombay and *viâ* Galle for the months of September to April inclusive, compiled from a notification issued from the office of the Postmaster in Bengal.

In parallel columns to the dates of departure I have given the dates on which these mails are due in London, from which it will be seen that while there is an interval of only one day between the departure of, for example, the mails of the 21st February *viâ* Bombay, and the 22nd *viâ* Galle, the former are timed to arrive in London six days before the latter. It may reasonably be presumed that another day will shortly be economised in the land transit of the mails between Bombay and Calcutta, and the anomaly will then be presented of the mails *viâ* Galle and *viâ* Bombay leaving Calcutta on the same day, and of the former reaching London a week in advance. The practical effect will be that no letters will then be sent *viâ* Galle at all.

As present arrangements are manifestly inconvenient, it appears essential that a weekly service should be introduced at as early a date as the existing contract with the Peninsular and Oriental Company will permit.

The mails are now forwarded *viâ* Agra, but that route will probably be abandoned when the through communication *viâ* Jubbulpore has been established; pending the opening of that line, however, the Government may consider it desirable that the completed sections should be availed of, and the intervening distance travelled by mail carts if there are sufficiently good roads for that portion of the Overland postal service.

TABLE of Dates of Despatch of Overland Mails from Calcutta *viâ* Bombay and Galle, and of Receipt in London *viâ* Marseilles.

Dates of Despatch from Calcutta.			Dates of Receipt in London.		
—	<i>Viâ</i> Bombay.	<i>Viâ</i> Galle.	—	<i>Viâ</i> Bombay.	<i>Viâ</i> Galle.
September - - -	20	22	October - - -	21	27
October - - -	5	8	November - - -	5	12
" - - -	20	22	" - - -	20	26
November - - -	5	8	December - - -	6	13
" - - -	20	22	" - - -	21	27
December - - -	6	8	January - - -	5	12
" - - -	21	22	" - - -	20	26
January - - -	6	8	February - - -	5	12
" - - -	21	22	" - - -	20	26
February - - -	6	8	March - - -	8	15
" - - -	21	22	" - - -	23	29
March - - -	6	8	April - - -	5	12
" - - -	21	22	" - - -	20	26
April - - -	6	8	May - - -	6	13
" - - -	21	22	" - - -	21	27

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Enclosure 4, in No. 37.

From *H. W. J. Wood*, Esq., Secretary to the Bengal Chamber of Commerce, to
E. C. Bayley, Esq., Secretary to the Government of India; dated 21st March 1865.

IN continuation of my letter of the 4th instant, I am desired by the Committee of the Chamber of Commerce to bring to the notice of his Excellency the Governor General in Council, that a memorial, bearing the signatures of the leading bankers and merchants of London interested in the India trade, has lately been presented to the Secretary of State, praying that an alteration might be made in the postal arrangements between England and this country; and that instead of the mails being closed in London on certain days of the month, they should be closed on a fixed day of the week, Friday being the day selected as the most convenient for various reasons.

This recommendation, if carried out, will involve the establishment of the weekly mail *viâ* Bombay, which the Chamber recently took the liberty of suggesting, for such concession would be deprived of much of its value if letters did not arrive, and opportunity was not afforded of replying to them at the same stated intervals as the mails were dispatched, which, as shown in my letter above referred to, will not be possible until a weekly mail service is established *viâ* Bombay.

I am to express a hope, therefore, that in view of this concurrence of opinion between the mercantile communities here and in London, his Excellency in Council will report favourably on the suggested change in the postal service from this country, to the Right Honourable the Secretary of State.

Enclosure 5, in No. 37.

From *J. Lindley*, Esq., Secretary to the Calcutta Trades' Association, to *E. C. Bayley*, Esq.,
 Secretary to the Government of India; dated Calcutta, 31st March 1865.

I AM directed by the Committee of the Calcutta Trades' Association, to state that they have read with much pleasure the memorial of the merchants and bankers of London praying for the establishment of a weekly mail from London to Calcutta. This Association being firmly convinced of the practical importance of this memorial to the mercantile and trading communities, and to the public at large, desire on their part to urge the expediency of the establishment of a weekly mail from Calcutta to London, *viâ* Bombay, in place of the present system of dispatch, *viâ* Galle and Bombay alternately.

The Association are well aware that the direct line of railway to Bombay is still far from being completed, but the progress already made in the lines of railway has very satisfactorily set aside all objections urged in former times against the system of land carriage communication of the mails; while the economy of time since effected by the acceleration of the transit of the mails *viâ* Bombay, has rendered the other route *viâ* Galle, of very little practical benefit to the mercantile and trading communities, and to the general public. The inconvenience of the present system may be illustrated by the last outgoing mails to Europe; the mail, *viâ* Galle, and the Marseilles one, *viâ* Bombay, both closing on the 22nd instant, and a mail *viâ* Bombay and Southampton on the 21st, the practical results of such arrangements will be that very nearly the whole correspondence will be forwarded by the Bombay route, inasmuch as it would reach London six days earlier than if sent *viâ* Galle.

The Association are not aware when the existing contract with the Peninsular and Oriental Steam Navigation Company will terminate; but they would respectfully urge, on its completion, the establishment of a weekly service *viâ* Bombay, the mails, instead of closing on a fixed day of the month, to close in Calcutta on a fixed day of the week. Believing that the carrying out of this arrangement would be regarded as a valuable public boon, the Association express the hope that this proposed alteration in the dispatch of the mails for England, &c., will be favourably received by his Excellency the Governor General in Council, and recommended for adoption to the Right Honourable the Secretary of State for India.

No. 38.

Mr. F. Hill to Mr. Merivale.

Sir,

General Post Office, 14 July 1865.

I AM directed by the Postmaster General to acknowledge the receipt of your letter of the 23d ultimo, in which you forward the copy of a letter from the Government of India, and of its enclosures, reporting upon the questions submitted for their consideration in 1863, with reference to the establishment of a weekly communication between this country and India *viâ* Bombay, combined with an increase in the postage on letters.

It appears that the Government of India strongly recommend that a weekly communication may be established between Suez and Bombay from the commencement of the ensuing year; but with regard to the question of the increase of postage, it seems that that Govern-
 ment

ment, under the impression that, as the measure had been relinquished as regards Australia, it would not be pressed in respect to India, have not entered on the discussion of the subject at any length. The Government, however, though not objecting to the small increase of charge on letters transmitted *via* Marseilles, suggested as a maximum by Mr. Riddell, Director General of the Post Office of India, think that the proposed increase would impose some hardship on a considerable portion of the European community in India, and would be very unpopular.

The Postmaster General fully agrees with Sir Charles Wood and the Government of India in the opinion expressed in your letter, of the advantage of substituting for the present postal service with India a weekly service, and in thinking that that service should be exclusively with Bombay; but his Lordship is of opinion that unless the object be accomplished by imposing additional taxation on the public generally (in the propriety of which, so far at least as relates to the English public, he cannot concur), these improvements can be obtained only by raising the postage, as proposed in my letter of the 8th January 1863.

Sir Charles Wood is no doubt aware that the service to India, even as now conducted, entails a heavy loss, such loss amounting to not less than about 80,000*l.* a year; and if without requiring higher rates of postage the service were to be altered in the way desired, this loss would probably be increased to about 120,000*l.*, and possibly to a yet larger amount.

By raising the postage, however, by way of Southampton to 1*s.*, and, *via* Marseilles, (so long as the present high transit charge through France continues), to 1*s.* 4*d.*, the loss would, it is estimated, be reduced to about 41,000*l.*

Should the commercial intercourse between the United Kingdom and India continue to increase at the same rate as of late, even this smaller loss would probably at no distant time disappear; and if instead of a loss a surplus should arise, then Lord Stanley of Alderley thinks that the question might properly be considered, of a gradual reduction in the rate of postage, with the hope of coming back by degrees to the present rates.

When, a few years ago, the question arose whether the packet service to China should be diminished or the postage increased (and that to the extent now suggested in regard to India), the merchants who were consulted, readily, and, I believe, cheerfully, consented to the increase of postage, an increase which, so far as Lord Stanley is aware, has not given rise to a single complaint, or caused any diminution in the amount of the correspondence; and in the communications which have taken place with the Australian Colonies, it has always been clearly stated that the Home Government can hold out no prospect of any increase in the packet service without a simultaneous increase in the rate of postage.

Thus, the suspension, not, as the Indian Government seem to suppose, the abandonment of the question of raising the postage to Australia, has been coincident with a postponement of the other question of making the service to Australia fortnightly instead of monthly.

If the benefit to be obtained by the proposed alteration in the mail service to India be as great as those who call most loudly for it stated it to be, the persons who will enjoy such benefit must surely be willing, rather than forego it, to pay the moderate rate of postage which has been named, a rate much less than that charged only 10 years ago, when the service was very inferior, for at that time besides a shilling rate, *via* Southampton, with an addition of 10*d.* if the letter went through France, there was a considerable further charge in India.

With regard to those who would suffer most by an increase of postage, and who might consider the greater frequency and regularity of the mail service as no compensation for such increase, namely, the large body of private soldiers in India, it must be borne in mind that the rate of postage to them would not be altered, but would remain as now, 1*d.* only per half ounce letter.

The calculation made by Mr. Riddell, that if the packets went exclusively to Bombay, instead of alternately to Bombay and Calcutta, the service could be established at a smaller cost than is now incurred, is fallacious. A similar statement was made by Mr. Riddell in 1860, and was replied to in a letter from this department to the India Office, dated the 15th November of that year.

The chief fallacy consists in supposing that the Indian service is paid for at a certain rate (4*s.* 6*d.*) per mile, and that by a reduction in the number of miles a corresponding saving would be effected.

The service is not paid for in that way; a given sum is paid, and it is true that that sum, divided by the number of miles run, yields a quotient of about 4*s.* 6*d.*; but so long as from commercial necessities steamboats go in certain proportions to Calcutta, and only in certain other proportions to Bombay, no material reduction in the cost of the Calcutta service can be effected by diminishing the number of mails sent by the Calcutta boats, while an increase in the number of mails sent to Bombay, by rendering necessary a corresponding increase in the number of boats on that route, would be attended with a large increase of expense.

It would be impossible to separate the Indian service from those to China and Australia, as suggested by Mr. Riddell, without having distinct services throughout, including that in the Mediterranean, an alteration which in all probability would much increase the cost of all three services.

The change in the rates of postage suggested by Mr. Riddell would be complex, irregular, and inconsistent with any existing scale, and would fail in the object in view, viz., that of making good the deficiency in the revenue. If, however, such changes as those named be suitable for India, there would be no objection on Lord Stanley's part to their adoption

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with respect to letters posted in India, provided the collection of postage, and the payment of the subsidy, be placed on the same footing as in the case of the Australian Colonies, viz., that of the Imperial and Indian Governments each paying half the subsidy, and keeping all the postage they collect.

Independently of the point under immediate consideration, Lord Stanley of Alderley would be glad to see such an alteration effected, as it would reduce the accounts between the two post offices, and be attended with other advantages.

The proposed diminution in the number of packets from Southampton would not (as ascertained by inquiry long ago) result in any decrease in the subsidy. The present packets from Southampton are required for the purposes of commerce, and must, therefore, continue to run, whether mails be sent by them or not.

Herman Merivale, Esq., C.B.,
India Office.

I am, &c.
(signed) F. Hill.

No. 39.

Mr. *Merivale* to the Secretary to the Post Office.

Sir,

India Office, S.W., 5 October 1865.

I HAVE laid before the Secretary of State for India in Council Mr. Hill's letter, dated the 14th of July last, on the subject of the proposed weekly postal communication between this country and Bombay, and the question of an increase in the rates of postage between England and India; and in reply I am directed to make the following observations for the consideration of Her Majesty's Postmaster General.

2. Sir Charles Wood observes with regret that the arguments of the Director General of the Post Office in India are considered by Lord Stanley of Alderley to be erroneous, and that Lord Stanley of Alderley is of opinion that, in order to carry out the proposed additional postal service to Bombay, without a largely increased charge to the State, it would still be necessary to raise the rates of Indian postage, although all postal service to Madras and Calcutta by sea should be discontinued.

3. The decision of the question is entirely in the hands of the Postmaster General. Sir Charles Wood, however, entertains a strong impression that if the question of postal communication with India were to be considered on its own merits, and apart from the interests of England and China on one side, and of England and Australia on the other, the proposed weekly mail to and from England and Bombay might be provided for at a charge for postal subsidy not exceeding that now paid for the whole of the Indian service.

4. Sir Charles Wood, however, cannot regard the question as one merely affecting the charge on the Imperial revenues. It has been the perception of the bearing of increased postal communication on the wealth and progress of a country that has induced statesmen of late years to consent to fiscal sacrifices for the purpose of obtaining it.

5. There can be no doubt that increased postal communication with India implies increasing relations with that country, increased commerce, increased investment of English capital, increased settlement of energetic middle class Englishmen; and from all of these sources the wealth and prosperity of England are probably more greatly increased than that of India; and at the present day there are classes in India, not private soldiers, to whom the increase of the rate of postage between the two countries would be not only a hardship but a positive hindrance to their progress.

6. Sir Charles Wood is thus of opinion, on the one hand, that the proposed increase of postage would be likely to have a most serious effect on the joint interests of England and India, and, on the other, that the charge of the additional service to and from Bombay might be provided for by reductions in other parts of the Indian service; and he trusts that the further consideration of the subject may lead Lord Stanley of Alderley to procure from the Lords of Her Majesty's Treasury the requisite authority to establish the weekly communication with Bombay, without any alteration of the existing rates of postage.

7. I am desired to forward, for the consideration of Lord Stanley of Alderley, a copy of a further letter, with its enclosures, which has been very recently received from the Government of India upon this subject.

I am, &c.
(signed) Herman Merivale.

Enclosure 1, in No. 39.

Home Department, Post Office, No. 7 of 1865.

To the Right Honourable Sir *Charles Wood*, Bart., G.C.B., Secretary of State for *India*.

Sir,

Simla, 21 July 1865.

IN continuation of our Despatch, No. 5, dated the 17th April, we have the honour to transmit copy of a correspondence with the Government of Bombay, relative to a proposal for additional mail communication between Bombay and Suez, together with copy of a note on the subject by the Director General of the Post Office.

From Bombay,
No. 1126, dated
22 June 1865, and
Enclosure.

To Bombay, No. 151,
dated 15 July 1865.

We have, &c.

(signed)

*John Lawrence.**G. A. Taylor.**W. R. Mansfield.**W. N. Massey.**W. Grey.**H. M. Durand.*

Enclosure 2, in No. 39.

From *F. S. Chapman*, Esq., Chief Secretary to the Government of *Bombay*, to the Secretary to the Government of *India*, Home Department.

(No. 1126, dated Bombay Castle, 22 June 1865.)

I AM directed by His Excellency the Governor in Council to forward to you for submission to His Excellency the Governor General in Council, copies of the correspondence noted in the margin, relative to a proposal for additional mail communication between Bombay and Suez.

Letter from the Superintendent, Peninsular and Oriental Steam Navigation Company, dated 30 May 1865.

Report by the Postmaster General No. 1416, dated 8 June 1865.

Government Letter, No. 1124, dated 22 June 1865.

Enclosure 3, in No. 39.

From *T. Black*, Esq., Superintendent Provincial and Oriental Steam Navigation Company, to the Chief Secretary to Government *Bombay* (dated Bombay, 30 May 1865).

I HAVE the honour to bring to your notice that the directors of this company contemplate the commencement of an additional fortnightly mail service between England and Bombay, in conjunction with their Calcutta and Suez Line, should sufficient encouragement be given to them by the Government and the public to warrant their trying the experiment.

2. The homeward steamers from Calcutta reach Suez about the 4th and 17th of the month, and it is proposed that the departure of the additional vessels from Bombay should be so timed as to allow of their reaching Suez on the same date as the Calcutta steamers.

3. In the same manner the additional Bombay mails would be despatched outward from Suez, simultaneously with the steamers for Calcutta, leaving about the 4th and 19th of each month.

4. My object in addressing you is to ascertain whether the Government of Bombay would be willing to offer substantial encouragement and pecuniary aid towards the carrying out of the proposed service.

5. The addition of two steamers a month to the postal service between Suez and Bombay could only be carried out at a very heavy outlay on the part of the company, and could not therefore be undertaken profitably without Government aid; at the same time the great and growing importance of Bombay as a commercial port, point to an increase in the means of communication with England as a most desirable and important object to be accomplished. It is also to be remembered that an increase in the mail service between England and Bombay gives equally increased means of communication to all other parts of India.

6. The memorial recently addressed to the Postmaster General by a number of leading merchants in London, and a similar memorial forwarded by the Bombay Chamber of Commerce, on the subject of the mail service, show that the commercial section of the community are fully alive to the advantages to be derived from increased postal communication, and I imagine that, in a political point of view, the scheme is equally desirable.

7. I shall be glad to be favoured with the views of the Government of Bombay on the subject, and as it is very desirable that arrangements for the proposed extension of the company's operations should be defined at as early a date as practicable, I shall be obliged by an early reply to this letter, in order that I may, if possible, convey the views of His Excellency the Governor in Council to the directors of the company, by the next outgoing mail.

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Enclosure 4, in No. 39.

REPORT by the Postmaster General (No. 1416), of 1865.

A PROPOSAL for additional communication between Suez and Bombay is, I learn, from the Director General of the Post Office in India (Appendix A.), before the Government of India.

2. The agents of the Bombay and Bengal Steamship Company, who have been running steamers casually from Bombay to Suez, and contemplate doing so regularly every fortnight, were officially asked to state what subsidy they required for such service, and have named (Appendix B.) 60,000*l.* per annum. This sum is about half the amount paid to the Peninsular and Oriental Company for the entire Mail Service between England and India by both routes of Southampton and Marseilles, westward of Egypt, and Calcutta, and Bombay, eastward of the same.

3. It would be advisable that the Peninsular and Oriental Company should be similarly called on to state the sum for which they are willing to undertake an additional fortnightly service to Suez. On the last occasion that tenders were invited from London those of the Peninsular and Oriental Company's (who tendered direct without the intervention of the India post office or Government) were so high as to preclude reception.

4. From whatever sum they ask a deduction ought, in my estimation, to be made, equal to the subsidy for the present mail service from Suez, *viâ* Galle to Calcutta, which will be unnecessary and superfluous for India as soon as direct weekly communication with Bombay is established.

5. The portion of it from Suez to Ceylon, to which, and to Australia, Tasmania, and New Zealand only, it will be necessary to be continued, ought to, and I presume will, be charged to those colonies.

6. I have no doubt, however, that these details will receive the fullest consideration from the Director General of the Post Office, who, many years ago, before the railways had advanced to one-fifth of their present extent, advocated more frequent and direct steam communication with England, *viâ* Bombay, and undertook to transport the whole of the mails across India in a shorter time, and with no greater expense than was paid by the State for the long sea route *viâ* Galle to Calcutta.

7. The extensions of the railway since have greatly increased the facilities of land transport; and as soon as the railways on this side of India are completed, on the Nagpore, extension to Nagpore or even to Surdee, from whence a made road extends to Nagpore, and upon the Jubbulpore extension as far as Kundwa, there will be available two trunk mail-cart routes, one for the Calcutta mails, and of one for those of the North Western Provinces and Punjab mails, which will admit of the rapid disposal of the entire correspondence of India in those directions with certainty and regularity. To effect the same in the direction of Madras, the completion of a mail cart road from Bruckapore to Hurryhur is essential and progressing rapidly.

Bombay, Postmaster General's Camp,
Mahableschwur, 8 June 1865.

(signed) *E. Impey*,
Postmaster General.

Enclosure 5, in No. 39.

From *F. S. Chapman*, Esq., Chief Secretary to the Government of Bombay, to the Superintendent of the Peninsular and Oriental Steam Navigation Company.

(No. 1124, dated Bombay Castle, 22 June 1865.)

I AM directed by his Excellency the Governor in Council, to acknowledge the receipt of your letter, dated 30th ultimo, and in reply, to inform you that the proposal for additional mail communication between Bombay and Suez is now under the consideration of the Government of India; that this Government fully recognise the advisability of the measure, and that if you are prepared to make any specific offer it shall be duly forwarded to the proper quarter.

Enclosure 6, in No. 39.

From *A. M. Monteath*, Esq., Under Secretary to the Government of India, Home Department, to *F. S. Chapman*, Esq., Chief Secretary to the Government of Bombay.

(No. 151, dated Simla, 15 July 1865.)

I AM directed to acknowledge the receipt of your letter, No. 1126, dated the 22d ultimo, forwarding a copy of correspondence relative to a proposal for additional mail communication between Bombay and Suez, and to forward in reply for the information of the Government of Bombay, a copy of a Despatch, No. 5, addressed to the Secretary of State, under date 17th of April last.

2. The correspondence now under reply will be forwarded to the Secretary of State in continuation of the above.

Enclosure 7, in No. 39.

NOTE by the Director General of the Post Office of India.

I AM decidedly of opinion that it is very desirable that the contract for the conveyance of additional mails to Bombay should, if possible, be given to some other company and not to the Peninsular and Oriental Company. This course was recommended some years ago by a Committee of the House of Commons, and as there is nothing in the navigation between Suez and Bombay to prevent an association of moderate means performing the service required, I think that it will be to the advantage of the public in India that the mail service should be entrusted to two different parties.

I do not understand why the Peninsular and Oriental agent applied to the Bombay Government for a subsidy; if I am not mistaken tenders have been publicly invited in England, and therefore no tender could be accepted here.

No. 40.

The Postmaster General to the Treasury.

My Lords,

General Post Office, 16 November 1865.

I HAVE the honour to lay before your Lordships a copy of some correspondence* between this department and the India Office, relative to the proposed establishment of a weekly mail service to Bombay, and to a recommendation on my part that concurrently with this alteration the rate of postage to India be increased by 6d. the half ounce letter, thus making the postage of such a letter *via* Southampton 1 s., and, (so long as the present high transit rate through France continues) *via* Marseilles, 1 s. 4 d.

* See Letters Nos. 33, 37, 38, and 39.

Your Lordships will perceive by the last letter from the India Office, dated the 5th ultimo, that notwithstanding the facts and arguments which I have adduced in favour of an increase of postage, Sir Charles Wood is still averse to this measure, and the decision on this subject rests with your Lordships, I think it well without further delay to submit the case to you.

With regard to Sir Charles Wood's impression that apart from the interests of England and China on one side, and of England and Australia on the other, the proposed weekly mail to and from England and Bombay might be provided for at a charge for a postal subsidy not exceeding that now paid for the whole of the Indian service, I have to observe, first, that it was decided by your Lordships many years ago, that India had as great an interest in the postal communication with China as has the United Kingdom, and that the Indian Government therefore must pay one-half of the loss which that communication entails, so that no expense would be saved to India by the withdrawal from the China packets of Indian letters. And, secondly, that I cannot agree with Sir C. Wood in his belief respecting the postal subsidy, which, in my opinion, would, by the proposed change be materially increased, since, as already pointed out, so long as steam ships for commercial purposes ply to Calcutta, little or nothing as a set-off against the additional cost of more than doubling the service between Suez and Bombay would be gained by ceasing to send mails by sea between Galle and Calcutta.

In Sir C. Wood's remark respecting the tendency of increased postal communication with India to increase the commerce and other beneficial relations between the two countries, I fully concur, but it appears to me that if that principle were to be logically carried out irrespective of other considerations, it would not merely prevent an increase of postage, but would lead to its entire abolition, if indeed the principle would not carry us yet further.

An injurious effect, similar to that which would arise from a diminution, or rather a slower rate of increase for a time of correspondence between the two countries (for the latter would no doubt be the practical operation of my proposal) would also attend any decrease in the quantity of cotton passing between the two countries; yet I feel sure that Sir C. Wood would not for a moment suggest that in order to keep up this quantity the two Governments should grant a bounty on its export by undertaking to pay part of the cost of its carriage. In principle, however, the two cases appear to me to be strictly analogous, since to convey letters at a less charge than that which their conveyance entails, is to all intents and purposes, to give a bounty on correspondence.

Ever since the mail packet contracts were placed under the management of the post office it has been the aim of this department to make the Packet Service self-supporting, and

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partly by its success in obtaining contracts on lower terms than formerly, partly by an increase in certain cases in the rates of postage, and partly by an augmentation in the number of letters, much progress has been made towards this end; and if the same policy be steadily pursued, I have little doubt that in the course of a few years the large sum which British taxpayers are still called on to contribute towards making good the excess of the packet subsidies beyond the amount of sea postage, will nearly if not entirely disappear; but what is now urged would be a retrograde movement, and, by its own action and its influence as an example (for such a concession would in all probability cause applications for similar concessions to the Australian and other colonies) all hope of rendering the Packet Service self-supporting would probably be indefinitely postponed.

If the Indian Government be so impressed with the importance of low rates of postage between the two countries as to be willing to take upon itself the whole loss arising from the Packet Service, there can be no objection on the part of the British Post Office, nor, I presume, on that of your Lordships, to the continuance of the present rates, but I can see no other ground on which it would be right for these rates to remain unaltered so long as the only other alternative is to call on British taxpayers to make still larger contributions for the purpose of effecting more frequent communication with India, which even under present circumstances imposes such considerable burthens upon them.

The Lords Commissioners of the Treasury.

I have, &c.
(signed) Stanley of Alderley.

No. 41.

Mr. Childers, M.P., to the Postmaster General.

My Lord,

Treasury Chambers, 27 November 1865.

I AM directed by the Lords Commissioners of Her Majesty's Treasury to inquire with reference to your Lordship's letter of the 16th instant, whether if the Indian Government should agree to adopt the plan recommended in Mr. Hill's letter to Mr. Merivale of the 14th July last, namely, that the Imperial and Indian Government should pay each half the Indian mail service and keep all the postage they severally collect, the proposed weekly mail to and from Bombay could be established without additional charge to this country, it being understood that no change would be made in the rates of postage by Southampton, or in the present arrangements as to the cost of the mail service to China and Australia.

I am to state that if your Lordship should be of opinion that such a plan would not entail additional cost on this country, my Lords see no objection to its being proposed to the Government of India.

I am to add that my Lords incline to the opinion that before long the line of postal communication between this country and Egypt will be *viâ* Italy rather than by the present routes, and that in discussing any change in the rate of postage to and from India, they consider that this prospect should be especially kept in view.

I am, &c.
(signed) H. C. E. Childers.

No. 42.

The Postmaster General to the Treasury.

My Lords,

General Post Office, 6 December 1865.

IN reply to the inquiry made in your Lordships' letter of the 27th ultimo, I have the honour to inform you that in the event of the Indian Government agreeing to adopt the plan recommended in Mr. Hill's letter to Mr. Merivale of the 14th July last, namely, that of the Imperial and Indian Governments each paying half the cost of the Indian mail service and keeping all the postage they respectively collect, the proposed weekly mail between England and Bombay could not be established without additional charge to this country.

The arrangement referred to would not in any way affect the question of the cost of the modified service; and, as that cost would certainly exceed the amount at present paid, and one-half of the excess would be payable by the Mother Country, an increased charge would necessarily fall upon this department by the establishment of a weekly mail to Bombay.

With reference to the last paragraph of your Lordships' letter, I beg leave to state that for some time past I have had under consideration the question of sending the Indian and Australian mails *viâ* Italy instead of *viâ* Marseilles, and that I will not lose sight of the advantages of this route when it shall appear that the railway communication is sufficiently advanced to admit of the mails being so forwarded with advantage.

I have, &c.
The Lords Commissioners of the Treasury. (signed) Stanley of Alderley.

No. 43.

Mr. Childers, M.P., to the Postmaster General.

My Lord,

Treasury Chambers, 14 December 1865.

I AM directed by the Lords Commissioners of Her Majesty's Treasury to state that my Lords have again attentively perused your Lordship's letter of the 16th ultimo, and the correspondence enclosed between your department and the India Office relative to the proposed establishment of a weekly mail service to Bombay, and to a recommendation on your part that concurrently with this alteration the rate of postage be increased by 6 *d.* the half-ounce, and have also had before them your Lordship's further letter of the 6th instant.

I am to state that, adverting to the objections which the Secretary for India appears to entertain to the proposed increase to the postage on the correspondence between the United Kingdom and India, my Lords are not prepared to adopt such a measure at the present time, and that they would not feel warranted in sanctioning the large increase to the charge for postal communication with India which would be entailed by the alteration in the service proposed, unless the Government of India should think fit to defray the entire amount of that increase.

I am, &c.

(signed) H. C. E. Childers.

No. 44.

Mr. F. Hill to Mr. Merivale.

Sir,

General Post Office, 21 December 1865.

WITH reference to your letter of the 5th October last, I have to request that you will state to Sir Charles Wood that the Postmaster General has brought under the consideration of the Lords Commissioners of Her Majesty's Treasury the whole of the correspondence which has taken place between the India Office and this department on the subject of the proposed weekly communication between this country and Bombay, and the recommendation, on the part of his Lordship, that concurrently with this alteration the rate of postage on letters to and from India should be increased from 6 *d.* to 1 *s.* the single rate.

The Lords Commissioners, adverting to the objections which Sir Charles Wood entertains to the proposed increase of postage, state that they are not prepared to adopt such a measure at the present time, and that on the other hand they should not feel warranted in sanctioning the large increase to the charge for postal communication with India which would be entailed by making the service to Bombay weekly, unless the Government of India should think fit to defray the entire amount of that increase.

I am, &c.

Herman Merivale, Esq., C.B., India Office.

(signed) F. Hill.

— No. 10. —

COPIES of CORRESPONDENCE relative to the proposed Transmission of the INDIAN and AUSTRALIAN MAILS by the Route of *Italy*.

No. 1.

Mr. Hammond to Sir Rowland Hill.

Sir,

Foreign Office, June 7, 1861.

I AM directed by Lord John Russell to transmit to you, to be laid before the Postmaster General, the accompanying copy of a despatch from Her Majesty's Minister at Turin, enclosing a memorandum communicated to him by the Italian Postmaster General, relative to a shorter route to the East Indies *via* Ancona and Alexandria.

No. 255.

Sir Rowland Hill, K. C. B.,
&c., &c., &c.

I am, &c.

(signed) E. Hammond.

Enclosure 1, in No. 1.

(No. 256.)

Sir James Hudson to Lord John Russell, M.P.

My Lord.

Turin, 1 June 1861.

In the early part of next year there will be a continuous and uninterrupted line of railway, with the exception of the break at the Mont Cenis, between Calais and Ancona.

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The means of communication with the East Indies, *viâ* Alexandria will therefore be accelerated between London and Alexandria, *viâ* Ancona, as compared with the present route *viâ* Marseilles by 22 hours, and when the same line is continued from Ancona to Brindisi there will be a further saving in time of 16 hours, in all 38 hours, as between London and Alexandria.

The Italian Government is quite prepared, as Count Cavour and Chevalier Peruzzi (Minister of Public Works) have informed me, to do all that lies in their power to facilitate the carriage of the Indian mail over this line.

I am told that a steamboat company, at the head of which is the late Commander in Chief of the Indian Navy is in the course of formation in England, and has already made proposals to this Government to carry the mails between Ancona and Alexandria.

I have the honour to annex to this despatch a memorandum upon this project which I have received from the Italian Postmaster General.

The Lord John Russell.

I have, &c.
(signed) James Hudson.

Enclosure 2, in No. 1.

(Translation.)

There can be no doubt that the Ancona route is preferable for the transmission of the Indian mails to that of Marseilles.

The distance from Alexandria to Marseilles is:—

Nautical miles	-	-	-	-	-	-	-	1,500
From Alexandria to Ancona	-	-	-	-	-	-	-	1,080
A mean difference of	-	-	-	-	-	-	-	420

The English steamers between Marseilles and Alexandria take 155 hours.

The quick trains between Marseilles and London take 29 hours, making a total between Alexandria and London of 184 hours.

If the English steamers made for Ancona, instead of Marseilles, they would go from Alexandria to London in 162 hours; thus in 22 hours less than by Marseilles as appears below:—

From Alexandria to London by Marseilles.

From Alexandria to Malta	-	-	-	-	-	86 hours.
From Malta to Marseilles	-	-	-	-	-	69 „
From Marseilles to Paris	-	-	-	-	-	19 „
From Paris to London	-	-	-	-	-	10 „
						184 hours.

From Alexandria to London, by Ancona.

Alexandria to Ancona	-	-	-	-	-	108 hours.
Ancona to Turin	-	-	-	-	-	12 „
Turin to Paris	-	-	-	-	-	32 „
Paris to London	-	-	-	-	-	10 „
						162 hours.

When the railway shall be completed to Brindisi the distance between Alexandria and London will be done in 146 hours, *i. e.*:—

Alexandria to Brindisi	-	-	-	-	-	84 hours.
Brindisi to Turin	-	-	-	-	-	20 „
Turin to London	-	-	-	-	-	42 „

It is also to be remarked that a few hours will soon also be gained between Susa and St. Giovanni di Moriani on the Victor Emmanuel Railway, as the railway will soon be finished from St. Giovanni di Moriana to Modane.

No. 2.

Mr. *F. Hill* to Mr. *Hammond*.

General Post Office, 29 June 1861.

Sir,

I HAVE laid before the Postmaster General your letter of the 7th instant, enclosing the copy of a despatch from Her Majesty's Minister at Turin, accompanied by a memorandum communicated to him by the Italian Postmaster General, on the subject of a continuous and uninterrupted line of railway (with the exception of a break at Mont Cenis), between Calais and Ancona, which will be open in the early part of next year, by means of which the mails between the United Kingdom and the East Indies, if forwarded *viâ* Ancona and Alexandria, might be accelerated by 22 hours as compared with the present route *viâ* Marseilles. The memorandum further states that when the same line is continued from Ancona to Brindisi, there will be a further saving in time of 16 hours.

Lord Stanley of Alderley has received this communication with much interest, and he will not lose sight of the advantage to be derived from the opening of this new line of railway, but he desires me to state to you, for the information of Lord John Russell, that in his opinion it would be premature to take any steps at present towards changing the route for the conveyance of the Indian mails.

E. Hammond, Esq., Foreign Office.

I am, &c.
(signed) *F. Hill*.

No. 3.

Mr. *F. Hill* to Mr. *Romaine*.

Sir,

General Post Office, July 1, 1861.

I AM directed by the Postmaster General to acquaint you, for the information of the Lords Commissioners of the Admiralty, that his Lordship has had before him a memorandum by the Italian Postmaster General on the subject of a continuous and uninterrupted line of railway (with the exception of a break at Mont Cenis), between Calais and Ancona, which will be open in the early part of next year, by means of which the mails between the United Kingdom and the East Indies, if forwarded *viâ* Ancona and Alexandria, might it is stated be accelerated by 22 hours, as compared with the present route *viâ* Marseilles.

Before taking any steps in this matter, Lord Stanley of Alderley will be glad to know the respective distances by sea between Alexandria and Marseilles, and Alexandria and Ancona, and he requests that you will move their Lordships to supply this information.

W. G. Romaine, Esq., C. B., &c. &c. &c.
Admiralty.I am, &c.
(signed) *F. Hill*.

No. 4.

Mr. *Merivale* to the Secretary to the Post Office.

Sir,

Indian Office, S.W., 3 July 1861.

I AM directed by the Secretary of State for India in Council, to transmit to you, for the purpose of being laid before Her Majesty's Postmaster General, the accompanying copy of a letter * from her Majesty's Minister at Turin, with its enclosure, on the subject of the opportunity of accelerating the means of postal communication between England and India, which will be afforded by the approaching extension of the railway system in Italy, and I have to state that Sir Charles Wood considers the subject to be one of great importance, and that it is his request, that if Lord Stanley of Alderley concurs in this opinion, his Lordship will consider whether arrangements may not be made for taking advantage of the route pointed out by Sir James Hudson for the conveyance of the Indian mails.

See Enclosure 1, in
Letter No. 1.

The Secretary, General Post Office.

I am, &c.
(signed) *Herman Merivale*.

App. No. 1.

No. 5.

Mr. *Pennell* to the Secretary to the Post Office.

Sir,

Admiralty, 4 July 1861.

WITH reference to your letter of the 1st instant, No. 616, M., I am commanded by my Lords Commissioners of the Admiralty to acquaint you, for the information of the Postmaster General, that the distance from Alexandria to Marseilles is 1465 nautical miles, and from Alexandria to Ancona, 1090 nautical miles.

I am, &c.

(signed) *C. W. Pennell*,
Pro. Secretary.

The Secretary, General Post Office.

No. 6.

Sir *Rowland Hill* to Mr. *Merivale*.

Sir,

General Post Office, 23 July 1861.

I HAVE laid before the Postmaster General your letter of the 3rd instant, enclosing a copy of the despatch from Her Majesty's Ministers at Turin, relative to an opportunity of accelerating the postal communication between England and India, which will be afforded in the early part of next year, by the extension of the railway system in Italy.

The Postmaster General had already received with much interest a communication on this subject from the Foreign Office.

You state that Sir Charles Wood considers this matter to be one of great importance, and that it is his request that, if the Postmaster General concurs in this opinion, his Lordship will consider whether arrangements may not be made for taking advantage of the route pointed out by Sir James Hudson, for the conveyance of the Indian mails.

Lord Stanley of Alderley desires me to inform you that he entirely concurs with Sir Charles Wood, in considering the establishment of this shorter communication with Alexandria as of the greatest importance, and that he will not lose sight of the advantage to be derived from the opening of the new line of railway to Ancona, but that, in his opinion, it would be premature to take any steps at present towards changing the route for the conveyance of the Indian mails, an opinion in which his Lordship trusts that Sir Charles Wood will concur.

It will, of course, be impossible for this department to avail itself of the new line of railway, until the question of the conveyance of the mails by sea between Ancona and Alexandria shall be definitively settled, and inquiry is therefore now being made with reference to the relative distances by sea between Alexandria and Marseilles, and Alexandria and Ancona.

I am, &c.

(signed) *Rowland Hill*.

Herman Merivale, Esq., C.B., India Office.

No. 7.

Mr. *Merivale* to the Secretary to the Post Office.

Sir,

India Office, 20 December 1861.

WITH reference to my letter of the 3rd July last, and to your reply of the 23rd idem, I am directed by the Secretary of State for India in Council to state, that having received information from the Foreign Office of the completion of railway communication with Ancona, it will be gratifying to him to find that, in the opinion of Lord Stanley of Alderley, the time has come for taking some steps for rendering that route available for the transmission of letters to and from India.

Sir C. Wood is aware that any arrangements for this purpose would call for careful consideration; but as Lord Stanley of Alderley concurs in his opinion of the importance of shortening as much as possible the time occupied in the transit of the Indian mails, he trusts that it may be found practicable to take advantage of the facilities afforded by the new route now opened through Italy.

I am, &c.

(signed) *Herman Merivale*.

The Secretary, General Post Office.

No. 8.

Mr. *Hammond* to Mr. *F. Hill*.

Foreign Office, 27 December 1861.

Sir,
 WITH reference to my letter of the 7th June last, I am directed by Earl Russell to transmit to you herewith, for the information of the Postmaster General, an extract of a despatch from Her Majesty's Minister at Turin, reporting the completion of the railroad to Ancona.

No. 411.

F. Hill, Esq. &c. &c. &c.

I am, &c.
 (signed) *E. Hammond*.

Enclosure in No. 8.

EXTRACT of a DESPATCH from Sir *J. Hudson*, dated Turin, 22 November 1861.

A LINE of railway has just been opened from Turin to Ancona direct, to the advantages of which line of rail, as regards the means of communication with the East Indies, I had the honour to call your Lordship's attention in my Despatch, No. 256, of 1st June last.

No. 9.

Mr. *F. Hill* to Mr. *Romaine*.

General Post Office, 13 January 1862.

Sir,
 I AM directed by the Postmaster General to acquaint you, for the information of the Lords Commissioners of the Admiralty, that his Lordship has under consideration the question of accelerating the postal communication between this country and India by means of the Italian railways which have lately been opened between Turin and Ancona, and which it is proposed ultimately to extend to Brindisi.

Before, however, arriving at any decision on this question, his Lordship is desirous of having full information with regard to the capabilities of those ports, and whether the harbours afford sufficient accommodation for the vessels of the class employed by the Peninsular and Oriental Steam Navigation Company in the conveyance of the Indian mails in the Mediterranean; and I am accordingly to request that you will move their Lordships to be good enough to supply the necessary information on this point.

I am to add, that the Peninsular and Oriental Company are bound, under their contract, to employ on the line between Marseilles and Alexandria vessels of not less than 600 tons, but that the vessels which they actually employ are of much larger tonnage. Similar vessels would no doubt be employed on the line between Ancona or Brindisi and Alexandria, in the event of its being decided to adopt that route.

W. G. Romaine, Esq., C.B., &c. &c. &c.
 Admiralty.

I am, &c.
 (signed) *F. Hill*.

No. 10.

Mr. *Romaine* to the Secretary to the Post Office.

Sir,

Admiralty, 23 January 1862.

IN reply to your letter of the 13th instant, requesting to know whether, in the event of the Italian railways being used for the purpose of accelerating the postal communication between this country and India, the ports of Ancona and Brindisi would afford suitable accommodation for the packets, and ready means of landing and embarking the mails, I am commanded by my Lords Commissioners of the Admiralty to request you will state to the Postmaster General that there is ample depth of water at both ports for the mail steamers of the Peninsular and Oriental Company, and the approaches to both are clear and well lighted at night.

At Ancona, if the authorities please, the mail steamer might embark and land the mails and passengers alongside Trajan's Mole; but at Brindisi the packet must anchor at rather more than half a mile from the town.

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The relative distances between these routes to Alexandria and *viâ* Marseilles are as follows:—

Marseilles to Alexandria	-	-	-	-	1,465 nautical miles.
Ancona to Alexandria	-	-	-	-	1,090 "
Brindisi to Alexandria	-	-	-	-	830 "

To the Secretary of the Post Office. I am, &c.
(signed) *W. G. Romaine.*

No. 11.

Mr. F. Hill to Mr. Hammond.

Sir,

General Post Office, 30 January 1862.

In your letter of the 7th June last, you transmitted to this office the copy of a despatch from Her Majesty's Minister at Turin, enclosing a memorandum, communicated to him by the Italian Postmaster General, relative to the adoption of the route of Ancona, instead of Marseilles, for the Indian mails; and in a further letter, dated the 27th ultimo, you informed me that the line of railway from Turin to Ancona has already been opened for public traffic.

The importance of shortening, to the utmost possible extent, the time occupied in the transit of the Indian and Australian mails is so great, that the Postmaster General considers it very desirable to communicate at once with the Government of Italy, for the purpose of ascertaining what facilities they are prepared to afford for the carriage of those mails between the Italian frontier of France and the port of Ancona.

By the convention between Her Majesty and the King of Italy, signed at London, the 12th December 1857, the Post Office of Italy undertakes the conveyance across the Italian territory of the closed mails which the British office may exchange with any British colony or with any foreign country.

The rates to be paid to the Italian Post Office for this transit are fixed at 10 centimes per single letter, and one franc per kilogramme, net weight, for printed papers of every description; but in the event of the Indian and Australian mails being forwarded through Italy, the substitution of a rate per ounce of letters for a rate per single letter would be convenient to this department.

It would also be necessary to obtain permission for an officer of the British Post Office to accompany the mails, and to keep them under his special charge during the transit, a place being reserved for him in the carriages conveying the mails; a stipulation to such effect is contained in the postal convention with France, but has not been introduced into the convention with Italy.

In requesting that Earl Russell will instruct Her Majesty's Minister at Turin to bring this question under the consideration of the Italian Government, the Postmaster General thinks that it will be desirable to furnish at the same time full information with respect to the average number of boxes forwarded by each of the four mails in every month to and from India, &c., and to the weight and bulk of those boxes.

I am accordingly directed to annex a statement giving all these particulars.

Besides the mail to and from England, there is at present landed and embarked at Marseilles, on each occasion of the arrival or despatch of an overland mail, a very large French mail, and if that mail should be also forwarded hereafter *viâ* Ancona, provision for its conveyance through Italy simultaneously with the English mail would require to be made. But on this point the Italian Government would, of course, enter into communication with the Government of France.

The Postmaster General desires me to state that, under the existing arrangements, the outward Indian mails are forwarded from London by the night-mail to France, and they reach Marseilles in 34 hours after their departure from London Bridge Railway Station.

The homeward mails necessarily arrive at Marseilles at varying hours. On their arrival, they are despatched from Marseilles by ordinary train or by special train, according to the hour at which they are landed. There are two regular mail trains daily, by the use of which the mails reach London in about 32 hours; but whenever, by the employment of a special train from Marseilles, either as far as Lyons or all the way to Paris, the ordinary despatch can be overtaken, the French Post Office invariably provides for such special trains.

It is important to obtain precise information with respect to the arrangements which the Italian Post Office will be prepared to make for the conveyance from the French frontier of the outward Indian, &c. mails, and for the prompt despatch to the French frontier of the homeward mails arriving at Ancona, as the advantage of the Italian route will greatly depend upon the nature and extent of those arrangements.

E. Hammond, Esq., Foreign Office.

(signed) *F. Hill.*

Enclosure in No. 11.

STATEMENT of the AVERAGE NUMBER of BOXES forwarded by each of the four Mails sent through *France* in each Month to and from *India, China, Australia, &c.*, the estimated Weight of those Boxes with their Contents, and the Cubic Measurement of each Mail.

OUTWARD.

Mails Despatched.	Number of Boxes.	Gross Weight.				Cubic Measurement.
		<i>Tons.</i>	<i>cwt.</i>	<i>qrs.</i>	<i>lbs.</i>	
3rd of the Month - - - - -	89	2	3	3	0	178
10th " - - - - -	92	2	2	1	0	184
18th " - - - - -	87	2	1	3	20	174
26th " - - - - -	232	6	4	3	9	670

HOMEWARD.

Mails Due.	Number of Boxes.	Gross Weight.				Cubic Measurement.
		<i>Tons.</i>	<i>cwt.</i>	<i>qrs.</i>	<i>lbs.</i>	
4th of the Month - - - - -	20	0	12	1	3	40
12th " - - - - -	53	1	9	3	9	151
20th " - - - - -	18	0	11	1	0	36
27th " - - - - -	27	0	14	1	7	54

(signed) *H. Mellersh.*

Foreign Branch Circulation Department,
7th January 1862.

No. 12.

Sir *Rowland Hill* to Mr. *Vandal*.

Sir,
General Post Office, 3 February 1862.
THE great interest with which Her Majesty's Government regard every means likely to have the effect of shortening the time occupied in the transmission of the overland mails to India, China, and Australia, has led them to consider whether an important advantage in this respect may not be obtained in consequence of the opening of the complete line of Railway between Turin and Ancona, and the result of the inquiries instituted shows that under the most favourable circumstances, it will be possible, by the adoption of that route, to effect an acceleration to the extent of nearly 24 hours.
This being the case, Her Majesty's Secretary of State for Foreign Affairs is about to request the British Minister at Turin to ascertain what facilities the Italian Government are prepared to afford for the carriage of the overland mails between the Italian frontier of France and the Port of Ancona.
Looking at the admirable manner in which, from the first establishment of the overland route, the French Post Office has performed the service of conveying these mails through France, and at the readiness with which it has at all times introduced every improvement of which the service seemed susceptible, the Postmaster General considers it only due to you to give you the very earliest intimation of the course intended to be pursued, feeling assured that you will properly appreciate the motives which have induced Her Majesty's Government to enter into the consideration of this question.
Although hardly necessary, the Postmaster General desires me to remind you that France will partake equally with England in any benefit to be derived from this acceleration.

I have, &c.
(signed) *Rowland Hill.*

M. Vandal, Paris.

App No. 1.

No. 13.

M. Vandal to Sir Rowland Hill.

Direction générale
des postes.1^{re} Division.
Bureau de la Corres-
pondance Etrangère.
Nota.—Vous êtes
prié de rappeler en
marge de votre ré-
ponse, le nom du
Bureau d'où est
partie la lettre ci-
contre.

No. 90,244.

Monsieur,

J'AI l'honneur de vous accuser réception de la lettre, en date du 3 Février courant, par laquelle tout en rendant justice à la célérité et à l'exactitude avec lesquelles le service du transport des malles Anglaises de ou pour l'Inde, l'Australie, et la Chine, s'effectue entre Calais et Marseille, vous voulez bien m'informer que le Gouvernement de Sa Majesté la Reine a cru devoir faire prendre des informations à Turin, sur les conditions auxquelles les malles Anglaises pourraient être transportées entre la frontière Française et Ancône, en raison de l'accélération que peut procurer aux dites malles l'achèvement de la ligne de Turin à Ancône.

Je m'empresse de vous remercier, Monsieur, de cette information et de vous prier de croire que mon Administration s'efforcera d'assurer la transmission des malles qui seraient confiées à son service pour être transportées entre Calais et le Mont Cenis, avec le zèle et l'exactitude que vous voulez bien reconnaître qu'elle apporte dans le service du transport des malles qui sont embarquées ou débarquées à Marseille. Il ne dépendra donc pas d'elle que les malles des Indes, de l'Australie, et de la Chine, n'obtiennent par la voie d'Ancône l'accélération que vous estimez pouvoir être obtenue par cette voie.

Agréez, monsieur, l'assurance de ma haute considération.

Le Conseiller d'Etat, Directeur General des Postes.

(signé) *E. Vandal.*

Sir Rowland Hill,

Secrétaire de l'Office Général des Postes à Londres.

No. 14.

Mr. Hammond to the Secretary to the Post Office.

Sir,

Foreign Office, 10 March 1862.

WITH reference to your letter of the 30th January last, relative to the question of the transit of the Indian mails through Italy, I am directed by Earl Russell to transmit to you, to be laid before Her Majesty's Postmaster General, a copy of a despatch from Her Majesty's Minister at Turin, forwarding an inquiry from the Italian Government, as to the net weight of the letters and of the printed papers usually conveyed by those mails.

The Secretary to the General Post Office.

I am, &c.

(signed) *E. Hammond.*

Enclosure 1, in No. 14.

Sir James Hudson to Earl Russell.

My Lord,

Turin, 3 March 1862.

WITH reference to your Lordship's despatch, marked No. 35, of the 17th February, I have the honour to enclose a communication received from the Director General of the Italian Post Office, requesting further particulars of the respective weights of the letters and the book-post in the mails for India.

The Earl Russell.

I have, &c.

(signed) *James Hudson.*

Enclosure 2, in No. 14.

The Director General of the Italian Post Office to Sir James Hudson.

M. le Ministre,

Turin, le 2 Mars 1862.

LE Ministre des Affaires Etrangères vient de me communiquer la note que V. E. lui a adressée au sujet du passage de la malle des Indes par la voie d'Ancône.

Pour compléter les études auxquelles je vais soumettre cette importante question il me serait nécessaire de connaître le poids net des lettres, et le poids net des imprimés contenus dans les deux directions.

Ces données pourront être facilement fournies à V. E. par le Post Office de Londres, et me mettront à même d'apprécier dans quelle mesure peuvent être accordées les facilitations dans les prix de transit à travers le territoire Italien.

A Son Excellence Sir J. Hudson,
&c. &c. &c.

Je prie, &c.

[No signature.]

No. 15.

App. No. 1.

Mr. F. Hill to Mr. Hammond.

Sir,

General Post Office, 17 March 1862.

HAVING laid before the Postmaster General your letter of the 10th instant, and its enclosure from Her Majesty's Minister at Turin. I am directed by his Lordship to transmit to you, in compliance with the request made by the Italian Government, a statement of the average net weight of letters and papers, &c., sent through France in each month to and from India, China, and Australia, in the year 1861.

E. Hammond, Esq., &c., &c., &c.,
Foreign Office,

I am, &c.
(signed) F. Hill.

Enclosure in No. 15.

STATEMENT of the AVERAGE NET WEIGHT of LETTERS and PAPERS, &c., sent through *France* in each month, to and from *India, China, and Australia, &c.*, in the Year 1861.

O U T W A R D.

MAILS DESPATCHED.	Net Weight of Letters.	Net Weight of Papers.	Total Net Weight.
	<i>Cwt. qrs. lbs.</i>	<i>Tons. cwt. qrs. lbs.</i>	<i>Tons. cwt. qrs. lbs.</i>
3rd of the month - - -	2 0 15	1 8 3 24	1 11 0 11
10th " " - - -	2 3 0	1 4 3 20	1 7 2 20
18th " " - - -	2 0 18	1 6 3 12	1 9 0 2
26th " " - - -	7 3 2	3 10 2 2	3 18 1 4

H O M E W A R D.

MAILS DUE.	Net Weight of Letters.	Net Weight of Papers.	Total Net Weight.
	<i>Cwt. qrs. lbs.</i>	<i>Cwt. qrs. lbs.</i>	<i>Cwt. qrs. lbs.</i>
4th of the month - - -	2 3 25	4 2 21	7 2 18
12th " " - - -	7 3 27	11 1 22	19 1 21
20th " " - - -	2 2 4	4 0 12	6 2 16
27th " " - - -	3 2 4	5 1 14	8 3 18

(signed) Frank Ives Scudamore,
Receiver and Accountant General.

12 March 1862.

No. 16.

Mr. Hammond to the Secretary to the Post Office.

Sir,

Foreign Office, 1 April 1862.

WITH reference to your letter of the 17th ultimo, on the subject of the transport of the Indian mail across Italy, *viâ* Ancona, I am directed by Earl Russell to transmit to you to be laid before the Postmaster General a copy of a despatch from Her Majesty's Minister at Turin, stating that the Director General of the Italian Post Office requests to be informed whether, in the event of the route by Ancona being decided upon, it is intended that the mails should be conveyed from Alexandria to that port in British steam vessels, or whether it is sought to enter into any arrangement with the Italian Government for their conveyance, and I am to request that you will move the Postmaster General to cause Earl Russell to be informed as to the answer which Sir James Hudson should be instructed to give to this inquiry.

The Secretary to the General Post Office.

I am, &c.
(signed) E. Hammond.

No. 86.

App. No. 1.

Enclosure in No. 16.

(No. 86.)

Sir *James Hudson* to Earl *Russell*.

My Lord,

Turin, 26 March 1862.

WITH reference to the communication which, by your Lordship's instructions, I made to the Italian Government on the subject of the transport of the Indian mail from Ancona to the French frontier, I have been requested by the Director General of the Italian Post Office to inquire of Her Majesty's Government whether in the event of the route by Ancona being decided upon it is intended that the mails should be conveyed from Alexandria to that port in British steam-vessels, or whether it is sought to enter into any arrangement with the Italian Government for their conveyance.

Lord Russell.

I have, &c.
(signed) *James Hudson*.

No. 17.

Mr. *F. Hill* to Mr. *Hammond*.

Sir,

General Post Office, 7 April 1862.

WITH reference to your letter of the 1st instant, I am directed by the Postmaster General to request that Earl Russell will be good enough to inform Her Majesty's minister at Turin in reply to the inquiry raised in his despatch of the 26th ultimo, No. 86, that, in the event of the route of Ancona being decided upon for the conveyance of the Indian and Australian mails, the mails will be forwarded by sea, between Ancona and Alexandria, by British packets.

At the same time the Postmaster General thinks it very desirable that it should be ascertained whether the Italian Government contemplate setting up packets of their own between Ancona and Alexandria, and, if so, on what terms they would be willing to carry the British mails should Her Majesty's Government at any time desire to make use of such packets, and his Lordship will be glad, therefore, if Earl Russell, in replying to Sir James Hudson, will instruct him to make inquiry on this point.

E. Hammond, Esq., &c. &c. &c.,
Foreign Office.I am, &c.
(signed) *F. Hill*.

No. 18.

Mr. *Hammond* to the Secretary of the Post Office.

Sir,

Foreign Office, 29 May 1862.

No. 146.

WITH reference to your letter of the 7th ultimo, I am directed by Earl Russell to transmit to you, herewith, to be laid before Her Majesty's Postmaster General, a copy of a despatch from Sir James Hudson enclosing copies of various papers on the subject of the proposed transmission of the Indian mails *via* Ancona, which have been communicated to him by the Italian Government.

The Secretary to the Post Office,
&c. &c. &c.I am, &c.
(signed) *E. Hammond*.

Enclosure 1, in No. 18.

(No. 146.)

Sir *James Hudson* to Earl *Russell*.

My Lord,

Naples, 13 May 1862.

No. 1.
Turin, 1 May, 1862.No. 2.
Turin, 28 April, 1862.No. 3.
Translation of above.No. 4.
No. 5.
No. 6.
No. 7.
No. 8.
No. 9.

I HAVE the honour to enclose herewith copies and translations of the correspondence which I have received from General Durando, and from the Ministry for Public Works, in reference to the project of the transit of the Indian mail *via* Ancona, together with copies and translations of the Report of the Commission upon the proposed law for the postal service between Ancona and Egypt; of the project of the law, and of the text of a convention between this Government and Mr. Mark Palmer for the establishment of a packet service between Ancona and Alexandria.

The Earl Russell.

I have, &c.
(signed) *James Hudson*.

Enclosure 2, in No. 18.

M. le Ministre,

Turin, 1 Mai 1862.

J'AI eu l'honneur de recevoir l'office que vous avez bien voulu m'adresser en date du 22 Avril dernier, et qui rappelle votre communication du 22 Février précédant, concernant l'éventualité du passage de la malle des Indes par la voie d'Ancone.

Pour satisfaire le désir que vous avez été chargé d'exprimer à ce sujet, je m'empresse d'abord de vous remettre le texte ci-joint d'une convention stipulée le 2 Janvier dernier

entre

entre le Gouvernement du Roi et le Sir Charles Marck Palmer pour l'établissement d'un service régulier de paquebôts à vapeur entre Ancône et Alexandrie d'Égypte, convention actuellement soumise à l'approbation du Parlement, et en faveur de laquelle la Commission de la Chambre des Députés s'est prononcée favorablement dans son rapport.

J'ai en même temps l'honneur de vous remettre une copie de la réponse que je viens de recevoir de mon Collègue au Département des Travaux Publics touchant l'objet de vos communications précitées. Vous y trouverez indiquées en détail les facilités que l'Administration des Postes Royales est disposée à offrir pour le transport de la malle des Indes de la frontière Italo-Française à Ancône, et même d'Ancône à Alexandrie, lorsque le service postal Italien entre le Continent et l'Égypte se trouvant établi le Gouvernement Britannique jugera convenable de confier à ce service le transport de la malle des Indes qui suivant ce que vous m'avez écrit le 22 Avril serait en attendant échangée entre Ancône et Alexandrie par des paquebôts Anglais.

Avec l'espoir que ces renseignements vous mettent en mesure de répondre d'une manière pleinement satisfaisante au désir de l'Administration Britannique,

Sir J. Hudson, K.C.B.

Je saisis, &c.
(signé) *Melegari.*

Enclosure 3, in No. 18.

(Translation.)

COPY of a Note from the Ministry of Public Works (General Direction of Post Office)
to the Ministry for Foreign Affairs, 28 April 1862.

THE undersigned duly received the communication of the 28th February last, accompanying that of the British Minister at Turin to the Government of the King, relative to the transit of the Indian mail through Italy.

An earlier reply was not sent, from the supposition that the British Government intended availing itself for the maritime transit of the Anglo-Indian medium of the line from Ancona to Alessandria, recently conceded to the firm of Palmer, and from the writer wishing to know the result of the deliberations in Parliament with reference to the above concession.

But as the Elective Chamber was prorogued at the very moment that the Report of the Parliamentary Committee entrusted with the examination of the Law of Concession was presented, and the note of the British Minister having been subsequently received (the 24th instant), imparting the intention of his Government to avail itself of English steamers for the conveyance of the Indian mail between Ancona and Alexandria, the undersigned is of opinion that he should no longer delay replying to the questions contained in the communications referred to upon a matter of such vital importance to our own country.

From the moment this Ministry entertained the idea of establishing a line of navigation between Ancona and Alexandria, it believed it could rely upon the acquisition of the transit of the Indian mail through the Italian territory, for a glance at the geographical position of the Italian peninsula suffices to remove all doubt that the road of Ancona, and still more so that of Brindisi, present advantages over that of Marseilles.

In fact, the maritime distance, which from Alexandria to Marseilles is 500 marine leagues, from Alexandria to Ancona is only 374, and from Alexandria to Brindisi only 274.

Under such favourable circumstances, the result of any competition between the Italian ports and those of Marseilles and Trieste, cannot be doubtful, provided that such obstacles are removed as might retard the English mails in their land transit between Ancona and the French frontier.

Considering, above all, the postal facilities which may be granted to the British Government, the undersigned is of opinion that they will abound; for the advantages which will result from the transit of the Anglo-Indian correspondence over the Italian territory are merely accessory and of minor importance, when compared with those of much greater consequence and general interest, resulting from the preference which will be given by travellers to the more expeditious route, as well as from trade.

This being admitted, the undersigned proposes that the tax upon the sealed despatches of the British Correspondence, which by the Convention of the 12th December 1857 was fixed at 10 centimes for every single letter, and at 1 franc for every kilogramme of printed works, should be reduced to 30 centimes per ounce (30 grains) for letters, and to 50 centimes per kilogramme for printed works; which price corresponds at an average with little more than '05 centimes per letters, and '02 centimes for books weighing 40 grammes.

In the next place, if the British Government should avail itself of the Italian steamers for the conveyance of the mail between Ancona and Alexandria, the conveyance by sea is offered at the rate of 60 centimes per ounce for every letter, and at 50 centimes per kilogramme for printed works, which would average little more than 10 centimes per letter and '02 centimes for every printed sheet, so that the sea conveyance and the land conveyance united would cost 90 centimes per ounce for letters and 1 franc per kilogramme for printed works.

It should be observed that the price of transit which England pays to France for the mere conveyance of the English correspondence in sealed covers from Marseilles to Calais is 1*l.* (lire) per ounce for letters, and 50 *l.* for every pound weight (453 grammé) of printed works, whence we may infer that the prices we offer are sufficiently reduced, and such as may be accepted by the British Government. They do not, however, admit of increase, for the

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transit through Italy does not exonerate the British Administration from the charge for the French transit at the rate which it now pays.

But the postal facilities are not the only advantages which the King's Government is willing to concede. Other considerations are necessary to ensure the preference for the Ancona line, such as express trains from Ancona to the French frontier, which shall start from each extremity immediately on the arrival of the mails, whilst for the passage of Mount Cenis superior and exceptional means of transport would be supplied.

To this end the writer proposes making the needful arrangements with the several railway companies who have the greatest interest in aiding the efforts of Government to obtain a result from which they would be the first to be benefited.

Meanwhile the Minister for Foreign Affairs may assure the British Government that this Ministry shall leave nothing unperformed that the mail conveyance over the Italian territory may be carried out in such a manner as not to compromise the benefits which may arise from the sea passage whenever the Ancona line shall be elected.

The Minister,
(signed) *Depretis.*

Enclosure 4, in No. 18.

(Translation.)

REPORT of the Commissioners, Deputies, Pepoli Conti, De Cesare, Mari, D'Avala, Susani, Marliani, Scocchera and Vacca, presented at the Meeting of 11 April 1862, upon the proposed Law from the Ministry of Public Works for the Maritime Post between Ancona and Egypt.

Gentlemen,

THE project of the law, presented by the Ministry for Public Works, the 31st January 1862, has for object to establish a maritime postal service between Ancona and Alexandria in Egypt.

Italy, which is now becoming a great naval power, should not remain behind in the development of its commercial and industrial resources. The railway from London is only interrupted at the Dover Straits and on Mount Cenis, and in a few hours reaches the Adriatic at Ancona. If the celerity of communication from our railways were limited to them, their utility would be restricted to the commerce of the interior; but the position of Italy being central in the Mediterranean, it were to ignore the precious boon if we did not endeavour to render it the true centre of all the industrial and commercial communications of Europe. Our relations with the East date from remote times, and before any other European power could boast of having them on such an extensive scale in the Archipelago, the Black Sea, Egypt, and the northern coast of Africa, Italy enjoyed this privileged position which gave such an impulse to her commerce and to her international interest with those regions. Hence, many emigrated to the East, principally to Egypt, where in a short time a colony grew up, which now numbers not fewer than 12,000 resident Italians. But the great advantages which will result from rapid communication with these regions of the Mediterranean, will certainly multiply when the communication of the Mediterranean with the Red Sea is obtained by the outlet of the Isthmus of Suez. Nothing will prevent our trade, nor our Government from carrying out the postal service as far as India, nor our coasts and ports, from becoming the first emporium of European commerce.

Italy is called to great destinies, and having once been the arbitrator of, and the first among nations, she may now resume her ascendancy; thanks to her geographical position and to her political importance in the reciprocal interests of the great powers.

It is from the port of Ancona that Government proposes to continue the road to Egypt by means of steamers, which constantly, and at fixed times, shall come and depart between Ancona and Alexandria.

It needs no effort to conceive the advantages to the new kingdom of Italy which are to be derived from this undertaking. These advantages, which will place us on a level with two other great European states, will be increased when the port of Brindisi shall become the centre of the southern railways.

Unquestionably the shortest and the easiest line at all seasons will be that of Brindisi, and therefore our postal line will be preferred to the Austrian of Lloyd's, and to the Imperial Messageries.

Your Commission, under these considerations, in principle has approved the project; it remains to be seen if the way for carrying it out as proposed by the Minister by means of a contract with the firm of Palmer of London, is or not the best adapted to our national and financial interests.

The subvention of 35 francs per league for the first five years, of 32 for the second, and of 30 for the last five years, might at first appear exorbitant, and your Commission has given it full consideration, and has interrogated the Ministry for Public Works to ascertain if it were possible to reduce the conditions to more moderate proportions, finding that a subvention of 34 francs per league were applicable when the point of departure is established at Brindisi. But Mr. Palmer did not feel himself enabled to offer more favourable conditions, but proposed a reduction of one franc per league when the service is established at Brindisi. It was, therefore, found expedient to yield for the great interests which are embodied in this undertaking.

Some of the Commission argued for an experiment by Government, but this idea which

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is plausible in theory is not practicable, as it is well known that Government are bad speculators, and that such undertakings have usually failed when under their direction.

In the last discussion of the Chamber upon the Rubaltino and Accossato contract, the utility of uniting in one all the postal lines was treated of; this would be an excellent notion, if practicable, but both by the late Ministry for Public Works and the present one, all attempts of this kind have proved ineffectual. But the Ministry does not despair of being able eventually to realise this vast project, and then it will be the proper time to oblige the company to establish in the kingdom arsenals for supplying the required steamers for the postal service. But at this moment, which under every aspect it is of the utmost emergency that these means of communication should be in operation as speedily as possible, it would be an exaggerated pretension to require that a small company should supply large funds for the establishment of machinery and building docks.

With respect to the clauses of Art. 6 of the Table of Regulations, where it is stipulated that the steamers shall command an average speed of 10 miles per hour, your Commission is unanimous upon the result of that long discussion upon the said article of the Rubaltino contract, viz., that by an average speed must be understood a medium "Semestrale," and hence, they have given their full adhesion to the project presented by the Minister.

Finally, upon the mode in which the value and size of the vessel is to be estimated, the Commission have observed that the tonnage, by builders' gauge, is the approximative measurement of capacity in proportion to the size of the vessel. This measurement is adopted in contracts with trade ship-builders. By these means and this scale of tonnage, the cost price of a vessel to be built is established. This measurement is generally adopted in England.

But measurement of capacity is likewise approximative, which more or less gives the tonnage of goods which a vessel may load. Every nation has a method of its own to determine the measurement with reference to port dues, anchorage, &c. The Commission, therefore, has not been able to establish fixed rules for such contracts, as they have reference to the country with which the contract for building a vessel is made.

The Commission, on presenting for your approval this project of law with the modifications annexed, trust that the Chamber will not impose new conditions, which, if not accepted by the Commissioners, would annul, at least for the present, the very important development of our Eastern relations.

Enclosure 5, in No. 18.

(Translation.)

PROJECT OF LAW.

Art. 1. The convention for the concession of the postal maritime service, dated 2nd January 1862, between the Minister of Public Works and the Minister of Finance, on behalf of the State, and Mr. Charles Mark Palmer, is approved.

CONVENTION for the concession of a Line of Navigation between *Ancona* and *Alexandria* (d'Egitto).

The Ministers of Public Works and of Finance, on behalf of the State, and Mr. Charles Mark Palmer, represented by Signor Ulrico Geisser, his agent, in virtue of a power of attorney, dated the 14th November last, have agreed to and stipulated, as follows:—

Art. 1. The firm of Charles Mark Palmer & Co. engages to carry on for 15 years a steam-packet service between Italy and Egypt, in conformity with the clauses and conditions contained in the table of regulations annexed to this convention.

Government awards to the Company a subvention of 35 francs per maritime league every voyage both ways for the first five years of the engagement, and of 32 per league for the following five years, and of 30 for the last five years.

Art. 2. In order to enable the Company to provide itself with the requisite materials for the service, Government will advance 1,500,000 francs, payable in fourths, on the arrival of each of the steamers belonging to the company, if possessing the qualities required by the table of regulations for the intended service.

This advance will not bear interest, and must be refunded to Government in 10 yearly payments of 150,000 francs each, payable in the 10 consecutive years from the first year of the service, and by means of a monthly instalment of 12,500 francs retained from the allowance of the subvention granted by Government.

Art. 3. As a guarantee for the advance of 1,500,000 francs, Government will hold as security the whole of the effects of the Company, which shall be made over to the Government.

The Company will be required to prove the absolute and free ownership of the vessels.

This guarantee will be proportionately reduced as reimbursement is made.

To this end a statement will be drawn up indicating the quality and quantity of the materials and their value, which shall be signed by the contracting parties, or by their representatives; the person who shall have the charge of the trust shall be named, and the act containing the statement of materials and the appointment of the trustee shall be inscribed upon the register of the marine, and note shall be made thereof in the records.

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Art. 4. As soon as the railway shall have been completed from Ancona to Brindisi, Government may remove the station (terminus from Ancona to Brindisi); if, however, this removal shall be found advisable for the exigencies of the service, by a commission duly appointed by Government.

This removal will not give rise to an indemnity in favour of the Company, and the subvention agreed upon in the first article shall be 33 francs for every marine league for the second and third periods of five years; but the subvention of 35 francs for the first five years shall remain unaltered.

Art. 5. Custom-house duties paid by the Company for machinery, iron, and utensils, introduced at Italian ports to replace worn-out machinery, or for repairs, shall be refunded in the company.

Whenever, from extraordinary circumstances, the price of coal at Ancona or Brindisi shall exceed 50 francs per ton, the excess up to 60 shall, to the extent of one-half, be contributed by Government; exceeding 60 francs, the full excess shall be contributed.

Art. 6. The present convention shall not be valid until confirmed by law.

If not approved by Parliament, this convention shall be void without right of indemnity to the company whatever, and the caution money, 500,000 francs, required by Article 20, shall be immediately restituted.

Done, in duplicate, at Turin, 2nd January 1862.

(signed) *Ubaldo Peruzzi.*
Pietro Bastogi.

Ulrico Geisser.

Enclosure 6, in No. 18.

(Translation.)

TABLE of CONDITIONS for the Concession of a Line of Navigation between Ancona and Alexandria.

Article 1.—The service shall be performed by steamers the property of the Company, and shall comprise four passages from Ancona to Alexandria per month, touching at Corfu, and *vice versa*.

For the first year the service shall, however, be limited to two passages per month.

The number of leagues between the two points is computed at—

From Ancona to Corfu	-	-	-	-	129 leagues.
„ Corfu to Alexandria	-	-	-	-	245 „
					374 „
„ Brindisi to Alexandria	-	-	-	-	274 „

Art. 2.—Government will retain the right to suppress the landings and to establish others, provided they do not prolong the line.

In such cases the conditions of the contract shall be mutually agreed upon.

For any contested case a council of arbitrators shall decide.

This council shall consist of two persons appointed by Government, and of two persons appointed by the Company. These four shall appoint, by majority of votes, a fifth, who shall be president. If there be a parity of votes, the nomination of the fifth arbitrator shall be made by the President of the Tribunal of Commerce, at the residence of the Ministry.

The council of arbitrators shall judge and provide irrevocably.

Art. 3.—The days of departure shall be fixed by the Ministry for Public Works, after consultation with the Company; and they may be altered, on giving two months' notice. The time-table of arrivals and departure must, however, always correspond with the arrival and departure of the Indian mail from Alexandria.

The Ministry of Public Works and the higher authorities of the province may, by written order, retard the departure of the steamers both at the stations and intermediate points, but not for more than three hours after the time fixed for their departure. This delay shall not give a right to indemnity.

The steamers shall not land at other places than those designated in their itinerary, except in extreme cases, justified by deposition according to law.

If the landing should occur in a foreign port, the deposition must be certified by the Italian consul.

Art. 4.—In Italian ports, a Government Commissary will be entrusted with the care of superintending the fulfilment of the conditions of this contract.

The Government Commissaries will have the right of inspecting the steamers, in such wise as not to delay the voyage, and they may be accompanied on such occasions by the persons whose assistance they may require.

The Government Commissaries shall be appointed by the Minister of Public Works and the Minister of Marine jointly.

Art. 5.—Before the departure of the steamers, the Government Commissioner shall take note if the immersion does not exceed the limit fixed upon for the whole cargo, viz., if it does

does not exceed the watermark for the load; and if the crew is complete; and also of the time of departure.

The Government Commissioner may require on all occasions to inspect the ship's journal and inventory of the instruments and stores which are indispensable for the voyage of a steamer.

Art. 6.—The steamers belonging to the service should be of the capacity of not less than 800 tons register, builder's measurement, and of an average speed of 10 knots an hour; they must bear the national flag, and be subject to all the laws and regulations to which other vessels of the kind are amenable.

The said vessels shall be solidly built, provided with good engines, such as shall meet the exigencies of their navigation, the prescriptions of the maritime laws, and fully answer the purpose for which they are destined.

No steamer shall be employed in the service until it shall have been examined and accepted by a special commission appointed by Government, who shall frame a regulation which, in conformity with the actual maritime laws, shall establish a system by which the capacity of the steamers, and their speed, the work performed by the engines, and their effectual solidity, may be rated. By means of this system, they will have to verify whether the vessels combine the requisites of the present table of conditions, and to settle the number of the crew for each steamer, in conformity with the regulations and custom of the mercantile marine.

With respect to the stores and armament requisite for the navigation, the regulations in force, and those of the assurance companies, must be observed.

The Company is required to possess the number of steamers necessary for the punctual and regular performance of the service. After the first year's service, the Company should not have fewer than four steamers, which shall each combine the conditions above stated.

Art. 7.—The Ministry of Public Works may at all times institute an inspection of the steamers, to verify if they are in a proper condition both for the regularity of the service and the accommodation of passengers.

Should they not be found to possess these requirements, they must be provided for as speedily as possible, and the instructions from the Ministry will have to be carried out, with reference to the responsibility of the Company for delays and their consequences.

In the event of any dissension between the person inspecting by order of the Ministry, and the Company, upon the state of the steamer, whether for its substitution or its repairs, the question shall be decided by a council of arbitrators, according to Article 2, who shall decide, after the inspection of the vessel by their delegate, upon the written evidence of both sides.

In case of shipwreck, or other accident whatever, whereby the steamer should be lost or rendered unserviceable, the Company will be allowed a period of 10 months to replace it. In the interim, the Company may avail itself of hired steamers, provided they are adapted to the service, and possess the speed required by Article 6.

Art. 8.—With the subvention granted by Government, the Company will be bound for the regular and complete conveyance of all postal correspondence, &c.

The payment of the subvention shall be made in 12 parts, &c.

Art. 9.—The Company are required to provide a large room in every steamer for the storing of despatches; it must be under lock and key, and the captain of the steamer will have the custody of it upon his own responsibility.

Should the Administration of the Post require an assistant to be on board, the Company is obliged to assign him a berth, &c.

The Company is bound to maintain a medical officer of the Royal Navy, should the post authorities require it, on board each steamer, &c.

When the steamer is compelled to cast anchor, from stress of weather, the Post Office official may require that the best procurable vessel shall be at his disposal for the conveyance of despatches, of which one of the officers of the steamer shall take the command.

Art. 10.—Should the steamers have to touch at any port not indicated in the inventory, Art. 1, and not be able to continue the voyage, the captain is strictly bound to consign the despatches to the office of the local or nearest post, to be forwarded to their destination by ordinary means, whenever it is impracticable to forward them by the first national or foreign steamer proceeding to the place of destination of the said despatches, the expense to be borne by the Company.

Art. 11.—The product from the conveyance of passengers and goods belongs exclusively to the Company.

The product from the conveyance of letters belongs exclusively to the Administration of the Post.

No correspondence whatever shall be received on board but that which is consigned by the post offices.

Any contravention of the postal laws by the Company or its agents shall be punished according to law.

On every steamer there shall be a portable letter-box, which shall be delivered jointly with the despatches at the post offices on landing.

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Art. 12.—The company is required to provide at half-price for the passage of civil and military functionaries on duty, board not included.

The Company, however, is not required to receive more than six in the chief cabin, nor more than six in the after-cabin of each steamer.

Art. 13.—Indigent and shipwrecked mariners returning home shall be conveyed at the State's expense, at the rate of five francs per day, board included.

Applications for passage are to be made to the Consul or Government Agent.

Such persons shall not exceed 10 in number, every voyage without the Company's consent.

At the same rate, and under the same conditions, vagabonds ordered home by the consular agents, shall be conveyed.

Art. 14. The Company is required to convey gratis every description of correspondence, and to the transport at reduced prices of persons as stipulated in Articles 12 and 13 on such lines as are not contemplated in the contract, but which may become a prolongation of the line conceded by this convention.

Art. 15. Passengers shall be treated with consideration. A register shall be kept open on every steamer in which passengers may record their complaints.

Complaints of a grave character shall be referred by the commissary to the ministry, who shall be empowered to remove such agents of the Company as may be found culpable.

Art. 16. In the event of war, Government is empowered to suspend or continue the service, and to take possession of the vessels, on remunerating the Company as may be estimated by the council of arbitrators, named in Art. 2.

In the first place, Government will assume the responsibility of the steamers, and of all relating to the service for any damage resulting from the war.

In the next place, and during the whole period of suspension of the service, the Subvention Art. 1, of the convention will cease, and the steamers of the Company may be hired by Government. The price and conditions of freight shall be mutually agreed upon, or fixed by the council of arbitrators, as per Art. 2 of the table of regulations, and the value of the ships shall be decided, which the Company shall receive in the event of loss exclusively from the war. Sea risk and fire assurance remaining at the charge of the Company.

Should Government not consent to freight the steamers, the Company shall receive during the interruption of the service an indemnity which shall be estimated by mutual consent, or by the aforesaid council of arbitrators.

Art. 17. The speed required by Art. 6, being an average one, viz., independently of weather, save and except in cases of unforeseen casualties, duly justified, the steamers of the Company shall perform in every six months, dating from 1st January and 1st July; the completion of their passengers going and returning between Ancona and Alexandria in 2,692 hours, whilst the service is limited to two voyages a month, and in 5,384 hours when it shall perform four voyages per month. In the hours enumerated above, stoppages at intervening ports are not included.

Should the above limit be exceeded by one-fortieth, viz., by 67 hours in the first period, or by 134 hours in the second, a drawback upon the convention due to the Company of 4 per cent. for every fortieth, shall be retained upon the subsequent subventions when the incurred excess is verified.

Art. 18.—For every delay at starting not justified by uncontrollable causes, the Company will incur a fine of 50 francs per hour. If the delay should exceed ten hours the fine shall be 100 francs per hour.

Whenever a steamer, from unjustifiable causes, shall touch at a port or harbour not specified in the itinerary, the Company shall incur a penalty of 2,000 francs.

The delay of the Company in replacing a steamer lost or disabled shall be punished by a fine of 300 francs per day, without prejudice to the penalties imposed by Art. 19 following.

The amount of fines shall be retained monthly from the subventions payable to the Company.

Art. 19.—Whenever the departure of a steamer is delayed without justifiable cause for 24 hours, the Government Commissary or Post Office Directors, after notice to the Company, shall, jointly with the local authorities, adopt the needful measures for forwarding the despatches by immediately freighting another steamer, and the expense incurred shall be at the cost of the Company.

In the event of a repetition of such delay, Government may, in writing, urge the director to carry on the service according to the tenor of the Table of Regulations; this advice shall have the efficacy of a legal and formal notice.

If, notwithstanding such notice, further delays should ensue, Government shall be empowered to annul the contract, which the Competent Tribunal may for this sole motive dissolve.

Art. 20.—As a guarantee for its engagements, the Company, on ratifying this contract, shall deposit, as caution money, 500,000 francs in specie or in bills on the Treasury.

Should the Company not be prepared to commence the service at the time fixed, the contract shall be considered dissolved, and the caution money be forfeit to Government, unless it shall be proved that the delay was caused by circumstances over which the Company had no control.

When

When the Company shall have commenced the service with two steamers of their own, built in conformity with the stipulations, the caution money of 500,000 francs shall be restored, and a portion of the materials shall be pledged to Government in lieu of security.

Art. 21.—The service shall commence within five months from the passing of the law approving the contract, and it shall last for 15 years from the day on which it shall commence.

During the first six months the Company may avail itself of hired steamers, if they possess the requisite conditions, and are not less than 700 tons with the prescribed speed in Art. 6, exceptionally reduced half a knot per hour.

At the end of the first year the Company is required to have all the material complete in conformity with the stipulations.

Should the Company engage to commence the service with steamers built expressly within eight months from the passing of the law approving the contract, Government will consent to the opening of the line, and to the commencement of the service, being protracted to the first day after the expiration of such period of eight months, and that the 15 years' duration of the concession shall date from that day.

Art. 22.—During the concession Government shall not award any subvention or favour to other companies for the line from Italian ports to Alexandria.

This interdiction does not apply to those lines which, leaving Italian ports, have not their chief stations in Egypt, but touch at intervening ports named in this concession; nor is it applicable to a proposed line between Genoa and Leghorn and Alexandria.

Art. 23.—The Company shall not concede to others the present undertaking, except by virtue of a law.

Should the Company act in contravention of this clause, Government is authorised to declare the contract annulled, without any judicial formality.

The Company, however, is not forbidden to take in more partners, nor to make over the "Concession en Comandite," by shares to bearer, under Mr. Palmer's direction.

The residence of the firm must be in the Royal States.

Art. 24.—All difficulties in the execution or interpretation of the clauses which may arise shall be judged by the Council of State, unless they are questions of maritime competency, in which case the Council of the Admiralty shall arbitrate.

Done at Turin, in duplicate, the 2nd January 1862.

Ulrico Geisser.

(signed) *Ubaldo Peruzzi.*
Pietro Bastogi.

No. 19.

Mr. F. Hill to Mr. Hammond.

Sir,

General Post Office, 6 June 1862.

I HAVE laid before the Postmaster General your letter of the 29th ultimo, enclosing, with reference to former correspondence, the copy of a Despatch from Sir James Hudson, together with copies of various papers on the subject of the proposed transmission of the Indian mails *via* Ancona which have been communicated to him by the Italian Government.

The Italian Government offer to convey the British mails over the Italian territory, on payment of the following transit rates, viz. :—

Thirty centimes per 30 grammes, for letters.

Fifty centimes per kilogramme, for printed papers.

And for this payment they declare their readiness to provide express trains between Ancona and the French frontier, to start from each end of the line immediately after the arrival of the mails, as well as superior and exceptional means of transport for the passage of Mont Cenis.

These terms appear to the Postmaster General to be quite satisfactory.

Before communicating, however, with the Peninsular and Oriental Steam Navigation Company with a view to the transfer of the Mediterranean packets from Marseilles to Ancona, Lord Stanley of Alderley requests that Earl Russell will be good enough to instruct Her Majesty's Minister at Turin to inquire at what period the Italian Government will be ready to undertake this service, in the event of this department making arrangements for using the Italian route.

His Lordship further requests that the attention of Sir James Hudson may be called to that part of my letter of the 30th January last, in which it was stated that, if the Indian mails were sent through Italy, a provision similar to that existing in the postal convention between this country and France would be necessary, under which the British mails are accompanied by an officer of the British Post Office, for whom a place is reserved in the carriages conveying the mails. In the communication now received no reference is made to this point.

It would be desirable, also, to reserve similar accommodation for the British mail officers

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on board the Italian packets, in the event of those packets being used for the conveyance of the mails by sea between Ancona and Alessandria. At present, however, it is not proposed by this department to make use of the Italian packets for the conveyance of these mails.

E. Hammond, Esq., Foreign Office.

(signed) *F. Hill.*

No. 20.

Mr. Hill to Mr. Romaine.

Sir,

General Post Office, 9 June 1862.

With reference to your letter of the 4th July last, stating that the distance between Ancona and Alexandria is 1,090 nautical miles, I have to request that you will acquaint me, for the information of the Postmaster General, with the distance in nautical miles from Ancona to Corfu and from Corfu to Alexandria.

W. G. Romaine, Esq., C.B., Admiralty.

(signed) *F. Hill.*

No. 21.

Mr. Pennell to the Secretary to the Post Office.

Sir,

Admiralty, 11 June 1862.

In reply to your letter of the 9th instant, I am commanded by my Lords Commissioners of the Admiralty to acquaint you, for the information of the Postmaster General, that the distance in nautical miles from Ancona to Corfu is 370, and from Corfu to Alexandria 750.

I am, &c.

(signed) *C. W. Pennell,*
Pro Secretary.

To the Secretary of the Post Office.

No. 22.

M. Vandal to Sir Rowland Hill.

Paris, le 5 Juillet 1862.

Monsieur,

PAR la lettre que vous m'avez fait l'honneur de m'écrire, le 6 Juin dernier, vous m'avez demandé à quelle heure les malles expédiées de Londres à 8 h. 30 m. du soir, les 3, 10, 18, et 26 de chaque mois, pourraient être livrées, par mon Administration, à la frontière Italienne. Vous avez ajouté que ce renseignement vous était nécessaire pour mettre le Maître Général des Postes à même de s'entendre avec l'Office des Postes Italiennes au sujet des avantages que peut offrir la voie d'Ancône pour la transmission des malles de l'Inde, de la Chine et de l'Australie.

Aussitôt la réception de cette lettre, je me suis empressé de faire recueillir tous les renseignements de nature à éclairer votre Département sur la question du transport des dites malles dans le parcours sur le territoire Français. C'est pour ce motif que je n'ai pas satisfait plutôt à votre demande.

Les dépêches partant de Londres à 8 $\frac{1}{2}$ h. du soir ne parviendraient pas à Paris en coïncidence avec le train par lequel sont expédiées les dépêches de Paris pour Turin. Il y aurait donc lieu, au cas où les malles Anglaises ne pourraient pas partir de Londres le matin, de les expédier chaque fois, en train spécial de Maçon à Saint Michel. Partant de Paris à 11 h. 5 m. du matin, les malles pourraient, pendant la belle saison, être rendues le lendemain à Saint Michel à 4 h. 30 m. du matin, et à la frontière Italienne à midi et demi. Si, au contraire, les malles Anglaises étaient expédiées de Londres le matin, partant de Paris à 8 h. du soir, elles pourraient, pendant la belle saison, être rendues le lendemain à Saint Michel à 1 h. 52 m. du soir, et à la frontière Italienne à 10 h. du soir.

Quelles que soient au surplus les heures de départ de Londres des dépêches Anglaises pour l'Inde, la Chine et l'Australie, l'emploi de trains spéciaux sera beaucoup plus fréquent sur les lignes de chemins de fer qui aboutissent au Mont Cenis et au moyen desquelles Paris ne correspond qu'une fois par jour avec Turin que sur la ligne de Paris à Marseille. Sous ce rapport, la voie d'Italie sera plus onéreuse que la voie de Marseille. Mais le plus grave inconvénient qu'offre la première de ces deux voies, c'est le passage du Mont Cenis, entre Saint Michel et Suze, passage qui ne peut s'effectuer, pendant la saison la plus favorable, qu'au moyen de voitures, et pendant la mauvaise saison, en partie au moyen de voitures et en partie au moyen de trains; d'où résulte la nécessité d'opérer dans la montagne, des transbordements en plein air et au milieu des neiges.

J'ai fait prendre des renseignements sur les frais qu'occasionnerait le transport de la malle des Indes entre Saint Michel et Suze. La compagnie avec laquelle mon Administration a déjà traité pour le transport des dépêches ordinaires échangées chaque jour entre la France et l'Italie, se fondant sur ce qu'il lui faudrait créer et entretenir pour cet objet un matériel spécial qui n'existe pas et qui ne pourrait être employé qu'au service des malles

malles Anglaises, a évalué à près d'un million de francs (961,320 f.) le prix de ce service. Mais suivant une autre évaluation, le service en question pourrait être effectué pour le prix de 450,000 f. environ. Il va sans dire que si, au lieu de traiter avec un seul entrepreneur, on devait établir deux services distincts, l'un pour le transport entre Saint Michel et la frontière Franco-Italienne, et l'autre pour le transport entre cette frontière et Suze les dépenses seraient à peu-près doublées. Il ne vous échappera pas non plus d'un autre côté que si la voie d'Ancône était adoptée, on pourrait peut-être obtenir une réduction sur les prix sus-mentionnés en mettant le service dont il s'agit en adjudication.

Vous savez peut-être, Monsieur, que conformément à la convention qui régle les rapports de poste entre la France et l'Italie, les frais résultant des services établis sur la frontière, par les Administrations des Postes des deux pays, pour le transport des dépêches ordinaires qu'elles échangent entre elles, sont supportés par ces Administrations proportionnellement, à la distance parcourue sur leurs territoires respectifs. Mais le transport des malles Anglaises de ou pour l'Inde, la Chine et l'Australie, constituant un service spécial qui devrait être organisé dans l'intérêt exclusif des dites malles ne saurait demeurer soumis aux règles concernant les services ordinaires.

Si l'opinion et les convenances particulières de mon Administration pouvaient être prises en considération dans la circonstance, il ne serait apporté aucun changement à la direction que suivent aujourd'hui les malles Anglaises; car, si la voie de Marseille est plus longue de quelques heures que celle d'Ancône, ce qui, à mon avis est de peu d'importance, en égard à la durée des trajets que parcourent les malles des Indes, de la Chine et d'Australie, elle a sur la voie d'Ancône l'avantage d'offrir, dans toute son étendue une ligne de chemins de fer à doubles voies sans solution de continuité, ne laissant rien à désirer sous le rapport de l'exactitude, et dont la rapidité, déjà si grande, pourra, sans doute être encore accrue ultérieurement. Par la voie d'Ancône, au contraire, il semble impossible d'obtenir jamais une vitesse et une régularité égales à celles des trains postes qui parcourent la ligne de Paris à Marseille. En effet, si les neiges opposent pendant une partie de l'année d'invincibles obstacles à la régularité de la marche des trains, et du passage des voitures à travers la chaîne des Alpes, la vitesse des convois est tres-restreinte en sa voie à cause des pentes beaucoup plus fortes que présentent les chemins de fer du pays et des précautions qu'il y a lieu de prendre sur ces chemins, particulièrement pendant la nuit. J'ajoute que les transports s'effectuant sur une seule voie, non seulement entre Culoz et S. Michel, mais encore entre Suze et Turin et entre Alexandrie et Ancône, les retards de route doivent, sur cette ligne, être bien plus fréquents que sur la ligne à double voie qui relie Marseille à Calais.

Mon Administration préférant, à une légère accélération éventuelle qui ne peut-être achetée qu'au prix d'assez graves inconvénients, la régularité et la sécurité qu'elle est sûre de trouver par la voie de Marseille, ne songe aucunement à placer dans le port d'Ancône la tête de la ligne des paquebots qu'elle doit entretenir pour le transport des malles qu'elle échangera avec l'Inde, la Cochinchine, et la Chine. Toutefois, je comprends que votre office, dans le but d'accélérer le transport de ces malles, désire pouvoir les diriger par la voie d'Ancône, et je ferai en conséquence tout ce qui dépendra de moi, pour seconder ce désir. Mais vous trouverez sans doute équitable, Monsieur, que mon Administration n'ait pas à supporter l'augmentation de frais qui pourrait résulter de ce changement de direction. Ainsi, dans le cas où les malles Anglaises seraient dirigées par la voie d'Ancône, il demeurerait convenu que l'Office Britannique tiendrait compte à mon Administration de tous les frais qu'occasionnerait le nouvel itinéraire sur le territoire Français en sus de ceux qu'elle supporte aujourd'hui.

Agréé, Monsieur, l'assurance de ma haute considération.

Le Conseiller d'Etat, Directeur Général des Postes,

(signed) *Ed. Vandal.*

Sir Rowland Hill,

Secrétaire de l'Office Générale de Postes à Londres.

No. 23.

Mr. Layard, M. P., to Mr. F. Hill.

Sir,

Foreign Office, 14 July 1862.

With reference to your letter of the 6th ultimo, I am directed by Earl Russell to transmit to you herewith, to be laid before Her Majesty's Postmaster General, a copy of a further Despatch from Sir James Hudson, respecting the transport of the Indian mails by way of Ancona.

F. Hill, Esq., &c. &c. &c.

I am, &c.

(signed) *A. H. Layard.*

No. 200.

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Enclosure 1, in No. 23.

(No. 200.)

Sir *James Hudson* to Earl *Russell*.

My Lord,

Turin, 30 June, 1862.

I HAVE the honour to enclose herewith to your Lordship copy of a communication from the Italian Government respecting the transport of the Indian mails by way of Ancona, in answer to the inquiries I was instructed to make by your Lordship's Despatch, No. 137, of the 9th inst.

The Earl Russell.

I have, &c.
(signed) *James Hudson*.

Enclosure 2, in No. 23.

M. le Ministre,

Turin, le 25 Juin 1862.

PAR votre office du 12 de ce mois vous m'avez exprimé de la part de votre Gouvernement le désir de connaître à quelle époque le Gouvernement Italien pourrait se trouver en mesure de donner suite aux engagements proposés relativement au transport de la malle des Indes par la voie d'Ancône. Vous m'avez fait connaître en même temps que votre Gouvernement attachait aussi du prix à s'assurer, si dans le cas dont il s'agit, les malles Anglo-Indiennes pourraient être accompagnées par un officier des Postes Britanniques.

M. le Ministre des Travaux Publics, à qui je me suis empressé de faire part de cette communication, me répond qu'avant de pouvoir préciser l'époque où le projet en question pourrait être mis en exécution avec les facilités proposées, il lui est indispensable de s'entendre avec les différentes compagnies de chemins de fer intéressées. Il ajoute qu'il va s'occuper incessamment d'amener une entente avec ses compagnies, et que, dans ce but, il aurait un intérêt particulier à obtenir des renseignements précis à l'égard des facilités que le Gouvernement Français accorde à celui de S. M. B. pour le transport de la malle des Indes entre Marseille et Calais, notamment de connaître :

1. Si la dépense occasionnée par les trains spéciaux est exclusivement à la charge de l'Administration Française.
2. Quel est le prix par kilomètre que l'on paye aux compagnies de chemins de fer pour les trains spéciaux.
3. Si ces trains spéciaux ne transportent que la malle des Indes, ou bien s'ils prennent aussi des voyageurs, et dans ce cas si le prix des places des voyageurs est perçu au profit du Gouvernement qui supporte la dépense des trains spéciaux.
4. Enfin, en combien d'heures s'effectue le transport de la malle entre Marseille et Calais, et vice versa.

Ces renseignements pouvant, j'aime à le croire, être aisément fournis par l'Administration Britannique, je vous serais fort reconnaissant, M. le Ministre, d'avoir l'obligeance de les lui demander de la part du Gouvernement du Roi, et de me les communiquer dès qu'ils vous seront parvenus.

En attendant, je m'empresse de vous faire connaître, pour ce qui concerne la seconde partie de votre office du 12 de ce mois, que M. le Ministre des Travaux Publics est tout disposé à prendre les dispositions nécessaires pour que l'on réserve une place, soit dans les convois des chemins de fer, soit sur les paquebôts nationaux, pour l'agent des postes Britanniques qui serait chargé d'accompagner la malle des Indes.

Veuillez, &c.

pour le Ministre,
(signé) *Melegari*.

Si *James Hudson*, K.C.B.

No. 24.

(No. 597—N.)

Mr. *F. Hill* to Mr. *Hammond*.

Sir,

General Post Office, 16 July 1862.

WITH reference to my letter of the 6th ultimo, on the subject of the proposed transmission of the mails to and from India, &c., by way of Ancona, I am directed by the Postmaster General to request that you will inform Earl Russell that, since the dispatch of that letter, his Lordship has been in communication with Monsieur Vandal, Director General of the Posts of France, for the purpose of ascertaining what arrangements the French Post Office are able and willing to make for the conveyance of the mails in question between Paris and the frontier of Italy.

Under the existing arrangement, and which it would be difficult to disturb, the Indian mails leave London at 8.0 p.m., and reach Paris at 7.20 on the following morning. They are dispatched from Paris to Lyons at 11.5 a.m., and reach Macon about half-past 8 in the evening.

evening. The line in the direction of Turin branches off from the Lyons line at Macon, but there is no train on that line fitted to the dispatch from Paris at 11.5 a.m.

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It appears by a letter just received from M. Vandal, that there is only one train daily from Paris by which mails are forwarded to Turin, and that this train leaves Paris at 8.0 p.m. Consequently the Indian mails, if sent through Turin, must either remain more than 12 hours in Paris, or a special train must be employed from Macon to St. Michel, the furthest point to which the railway goes.

With respect to the arrangements for the conveyance of those mails between St. Michel and Susa, at which the railway commences on the Italian side of the Alps, M. Vandal estimates that the lowest expense which it would be necessary to incur for this part of the service would amount to 450,000 francs, or about 18,000 *l.* per annum; and this is on the assumption that the whole service, whether on the French or the Italian territory, is performed by one contractor.

In giving this estimate M. Vandal points out that it will be requisite that this department should repay to the French Post Office all disbursements which the transit of the Indian mails may occasion over and above those now incurred in the carriage of the mails by the route of Marseilles.

The Postmaster General has directed me to transmit with this letter an extract of that part of the communication received from M. Vandal, which contains the estimate before referred to, and to request that you will move Earl Russell to forward it to Her Majesty's Minister at Turin, with instructions to ascertain whether the Italian Government can suggest any means by which the transit of the mails across Mont Cenis can be efficiently performed at a lower rate.

I am at the same time to observe that the Postmaster General cannot believe that Her Majesty's Government would be willing, for the sake of the utmost acceleration that could be obtained by the use of the Ancona route, to bear the great additional expense which it now appears likely that the change would occasion, whilst if this expense be not incurred, it seems doubtful whether any acceleration could be obtained.

In considering the question of sending the Indian mails through Italy, there is one very important fact which must not be lost sight of, and that is that the railways between Culoz and St. Michel, between Susa and Turin, and between Alessandria and Ancona, are single lines only.

Owing to this circumstance there must always be great risk of delay, and the Postmaster General will be glad if Sir James Hudson be directed to ascertain whether there is any intention of laying down a second line of rails on the railroads mentioned, and, if so, how soon this is likely to be done.

E. Hammond, Esq., Foreign Office.

I have, &c.
(signed) F. Hill.

No. 25.

Sir Rowland Hill to M. Vandal.

(No. 597—N.)

General Post Office, London,
17 July 1862.

Sir,
I AM directed by the Postmaster General to acknowledge the receipt of your letter of the 5th instant (52,529) on the subject of the contemplated transmission of the British Overland Mails to and from India, China, and Australia, by way of Ancona.

In adverting to the advantages of the present route, by way of Marseilles, over that *viâ* Ancona, you call attention to the fact that the former offers throughout its extent a double line of rails, without any break, whilst over several portions of the route between Macon and Ancona the line is only a single one, and you observe that the speed maintained on the Marseilles route, already great, may, no doubt, be ultimately augmented.

With reference to this remark, I am desired by his Lordship to request that you will be good enough to inform him whether there is any present intention of increasing the rate of speed of the express trains between Calais and Marseilles, and, if so, to what extent.

Monsieur E. Vandal, &c. &c. &c.,
Paris.

I have, &c.
(signed) Rowland Hill.

App. No. 1.

No. 26.

(No. 605, Juillet 1859.—Tel.)

Direction Générale
des Postes.

Monsieur,

1^{re} Division.
Bureau de la Corres-
pondance Étrangère.
Nota.—Vous êtes
prié de rappeler en
marge de votre ré-
ponse, le nom du
Bureau d'où est
partie la lettre ci-
contre.Marche des trains
entre Calais et
Marseille.*M. Vandal to Sir Rowland Hill.*

Paris, le 21 Juillet 1862.

PAR la lettre que vous m'avez fait l'honneur de m'écrire le 17 Juillet courant, vous me demandez si mon Administration est dans l'intention de faire accélérer la marche des trains entre Calais et Marseille.

Je m'empresse de vous faire connaître que mon Administration n'a en ce moment aucun projet ayant pour but l'accélération du transport des dépêches entre Calais et Marseille.

Agréez, Monsieur, l'assurance de ma haute considération.

Le Conseiller d'Etat, Directeur Général des Postes.

(signé) *E. Vandal.*

Sir Rowland Hill,

Secrétaire de l'Office Générale des Postes à Londres.

No. 27.

(No. 622—N.)

Sir Rowland Hill to Mr. Layard, M.P.

Sir,

General Post Office, 21 July 1862.

I HAVE laid before the Postmaster General your letter of the 14th instant, and its enclosures, from Sir James Hudson, and in the reply to the inquiries made by the Italian Government in the Despatch dated the 25th ultimo, I am directed to state to you, for the information of Earl Russell, that the special trains used in France for the conveyance of the Indian and Australian mails, are provided entirely at the cost of the French Post Office, and that this department is unable to afford any information with reference to the conditions under which such trains are employed, or the expense incurred in using them.

As regards the inquiry as to the time occupied in conveying the mails from Marseilles to Calais, and *vice versa*, his Lordship desires me to state that, in the ordinary course, the outward mails are always carried by the regular mail train leaving Calais at 1.30 a.m., and the time occupied in the journey to Marseilles is 29 hours. On the homeward journey the mails leave Marseilles (if in time) by the regular mail trains, and occupy about 27 hours in the journey to Calais. If too late for the regular train, a special train is used, whenever it can be employed with advantage, to overtake the mail train.

I am, &c.

A. H. Layard, Esq., M.P., &c. &c. &c.
Foreign Office.

(signed) *Rowland Hill.*

No. 28.

Mr. Hammond to the Secretary to the Post Office.

Sir,

Foreign Office, 20 September 1862.

WITH reference to your letter of the 16th of July, I am directed by Earl Russell to transmit to you, to be laid before the Postmaster General, a Despatch from Her Majesty's Minister at Turin, enclosing the answer which he has received from the Italian Government upon the question of the transmission of the Indian mails *via* Ancona, and I am to request that these papers may be returned to this office when done with.

I am, &c.

The Secretary to the General Post Office.

(signed) *E. Hammond.*

Enclosure 1, in No. 28.

Sir James Hudson to Earl Russell.

My Lord,

Turin, 5 September 1862.

WITH reference to your Lordship's Despatch, No. 189, of the 21st July last, enclosing copy of a letter from the General Post Office, pointing out certain difficulties which stand in the way of carrying out a scheme which had been proposed for the transmission of the Indian mails *via* Ancona, I have the honour herewith to enclose the copy of a note, and its enclosures (with translation of the latter), which has been addressed to me by General Durando, in reply to a note of mine of the 25th of July, in which I communicated to his Excellency the letter from the General Post Office above referred to.

I have, &c.

The Earl Russell, K.G.,
&c. &c. &c.

(signed) *James Hudson.*No. 1.
August 28, 1862.

No. 2.

No. 3.
Translation.

Enclosure 2, in No. 28.

Monsieur le Ministre,

Turin, le 28 Août 1862.

PAR la note dont je m'empresse de joindre ici une copie, mon collègue au Département des Travaux Publics répond aux observations faites par la Direction des Postes Anglaises sur les difficultés qu'on rencontrerait dans l'établissement d'un service pour le transport de la malle des Indes sur le territoire Italien d'Ancone à Suse, et à travers le Mont Cenis, observations qui trouvent leur explication dans les documents joints à votre note du 25 Juillet dernier.

De cette réponse il résulte que ces difficultés pourraient bien être aplanies, moyennant des accords avec l'Administration des Postes Françaises et avec celle des chemins de fer Français, le Gouvernement du Roi étant de son côté disposé à y concourir de bon gré.

En vous priant, Monsieur le Ministre, de communiquer la dite réponse de mon collègue à l'Administration des Postes Anglaises, j'attends que vous voudriez bien me faire connaître les dispositions que cette Administration croira prendre par conséquent sur ce sujet.

Je saisis en même temps l'occasion,

&c. &c.

Pour le Ministre,

(signé) Melegari.

Sir James Hudson.

Enclosure 3, in No. 28.

(Translation.)

COPY of a Note of the Ministry of Public Works, dated 21st August 1862.

FROM the Report of the Director General of the British Post Office, communicated to this Ministry the 30th July, the undersigned has observed that many serious obstacles present themselves to the proposed conveyance of the Indian mail *viâ* Ancona, consisting chiefly, firstly, in the enormous expense which, from the calculations of the Administration of the French Post, the transit over Mount Cenis would occasion; 2ndly, from there being only one direct train between Turin and Macon; 3rdly, from the absence of a double rail on the line of Culoz, St. Michel, Turin, and Susa, and between Alessandria and Ancona.

The undersigned has procured the most ample information upon the eventual cost of the transfer of the Indian mail between Susa and St. Michel; and it results, from the estimates of the French Post, that the expense, which was rated at 450,000 francs, has been greatly exaggerated, for it is not a question of organising a new service of transit, for which certainly that sum would not have been excessive, but of merely amplifying the existing one.

The Administration of Conveyance over Mount Cenis, which unites with the two branches of the Victor Emmanuel line at Turin, of Susa and St. Michel to Culoz, is bound to provide the needful for the conveyance of an indefinite number of passengers and goods. However, it was found practicable to make accurate estimates, from which it results that the transport of the Indian mail over Mount Cenis may be confidently rated at a cost not exceeding 100,000 francs per annum.

The fact that only one direct train between Turin and Macon exists, is undoubtedly a drawback to our relations with France, and which for some time past has been matter of regret; but assuredly, on the Italian side, there would be no opposition to the establishment of two direct trains, were France disposed to concur.

The third difficulty is the greatest, as it arises from the want of a double line between Culoz and St. Michel, between Turin and Susa, and between Alessandria and Ancona. But that difficulty would be greatly diminished by the establishment of a second train direct between Macon and Turin, for these trains might be, as a general rule, used for the transport of the Indian mail in the direction of Susa to Ancona, as the arrival at Susa might be regulated at fixed hours. In the contrary direction, viz., from Ancona to Susa, when the departure would depend upon the arrival of the steamers, the need of special trains to catch the postal train, as is practised in France, would frequently occur. Upon this point the Italian railway companies interested therein are entirely disposed to provide special trains, upon the same conditions as they are now supplied by the French railways. It must, however be understood that the prices established by the Italian Administration of Posts for the transit of the Indian mail from Ancona to the French frontier, proposed at the rate of 30 centimes per ounce for letters, and of 50 centimes per kilogramme for book post, was not to comprise the obligation on the part of the Administration to incur the extraordinary expense of special trains, nor of the transport over Mount Cenis, it being evident that such would not be sufficient to cover even the cost of the special trains alone.

App. No. 1.

By the note of the British Legation, with the accompanying Ministerial Despatch of the 12th instant, it would appear that the actual cost of special trains between Calais and Marseilles is incurred by the Administration of the French Post. Certain unofficial information, which there were grounds for believing correct, led to the belief that the cost was borne by the British Government.

However it may be, it should be remarked that the price of 1*l.* for 30 grammes weight of letters paid by England to France for the transit of the Indian mail over French territory, is nearly four times as much as we offered, and therefore not only sufficient to compensate the French Administration for any cost incurred by the transport of the said mail, but also to leave a large profit.

From this it would not appear that the obstacles alluded to in the note of the Directors of the British Post are of a nature to abandon the project of the transport of the Indian mail *viâ* Ancona.

The enclosures in the note from the Ministry of the 30th July are herewith returned.

The Minister,
(signed) *Jo. Depretis.*

No. 29.

(No. 802—N.)

Mr. *F. Hill* to Mr. *Hammond*.

Sir,

General Post Office, 16 October 1862.

I HAVE laid before the Postmaster General your letter of the 20th ultimo, enclosing copy of a Despatch from Her Majesty's Minister at Turin, forwarding an answer which he has received from the Italian Government, upon the question of the transmission of the Indian mails *viâ* Ancona.

It appears from the report now furnished by the Minister of Public Works, dated 21st August 1862, that the prices fixed by the Italian Administration of Posts in the Report of the 28th April last, for the transit of the Indian mails from Ancona to the French frontier, at the rate of 30 centimes per ounce for letters, and of 50 centimes per kilogramme for printed papers, do not include the expense of special trains, nor the transport of the mails over Mount Cenis.

The interpretation, however, which the British Post Office put on the report referred to, was different from this, it being stated in that report "that the postal facilities offered are not the only advantages which the King's Government is willing to concede; that other considerations are necessary to ensure the preference for the Ancona line, such as express trains from Ancona to the French frontier, which shall start from each extremity immediately on the arrival of the mails, whilst for the passage of Mount Cenis superior and exceptional means of transport would be supplied."

From the foregoing statement it was fully understood that the sum for which the Italian Government had offered to convey the mails over the Italian territory would include all expenses of conveyance, whether by express trains between Ancona and the French frontier, or by the exceptional means of transport over Mount Cenis; and it was in consequence of this understanding that, in my letter to you of the 6th June last, I stated that the terms offered by the Italian Government were quite satisfactory to this department.

If the view originally taken by this department as to the offer of the Italian Government was erroneous, the whole question of the transit rate to be paid for the Indian mails *viâ* Ancona, must be re-opened; and, therefore, before proceeding further in the matter, the Postmaster General requests that Earl Russell will have the goodness to instruct her Majesty's Minister at Turin to communicate the above observations to the Italian Government, and if that Government still thinks the railway sufficiently advanced to make it desirable at the present stage to pursue the matter further, to inquire at what rate per ounce for letters, and per kilogramme for printed papers, it would undertake the entire cost and responsibility of conveying the mails over the Italian territory, including the passage of Mount Cenis, and the employment, whenever necessary, of express trains, and also in what number of hours it would guarantee the complete transit to and from the French frontier.

When this information is supplied it will be necessary, before coming to a decision, to obtain similar information respecting the transit through France.

E. Hammond, Esq.,
Foreign Office.

I am, &c.
(signed) *F. Hill.*

P. S.—I return, as requested, the enclosures which accompanied your letter.

No. 30.

Mr. *Hammond* to Sir *Rowland Hill*.

Sir,

Foreign Office, 15 October 1863.

WITH reference to previous correspondence upon the subject of the transmission of the Indian mails through Italy, I am directed by Earl Russell to inclose to you, for the consideration of the Postmaster General, a copy of a despatch from Her Majesty's Consul General at Naples, recommending that an Englishman should be appointed vice-consul at Brindisi, in the event of the Indian mails being sent by that post.

I am also to transmit to you a copy of a letter which has been received from the India Office upon this subject; and I am to request that you will move the Postmaster General to inform Lord Russell of the decision he may come to in regard to the passage of the Indian mail through Brindisi.

I am, &c.

(signed) *E. Hammond.*

Sir Rowland Hill, K.C.B.

Enclosure 1, in No. 30.

(No. 56—Consular.)

Mr. *Bonham* to Earl *Russell*.

My Lord,

Naples, 22 September 1863.

WITH reference to my despatch, No. 52, Consular, of 11th September, I have the honour to report to your Lordship that great progress is being made in the railway along the coast of the Adriatic, the works being, I am assured, in a forward state all along the line; it is already opened to Ortona, in the Abruzzi Litorale, and there seems reason to hope that it will be completed and opened to Foggia by the beginning of December, and to Brindisi, in January 1864.

The postal authorities here believe that as soon as this line is opened the Indian mail will be sent by way of Brindisi instead of by Marseilles; whether they have grounds for this belief I am, of course, unable to say; but if such should be the intention of Her Majesty's Government, I would venture to submit to your Lordship, that it is very important the post of vice-consul at Brindisi should be occupied by an Englishman instead of by a native, as that port will in such case speedily become a place of importance, and the amount of English interests large.

The projected lines from hence to the Adriatic coast are, unfortunately, by no means in so forward a state; and it will, I fear, be some years before a direct communication can be completed between this coast and the Adriatic, owing to the great difficulty of crossing the Apennines.

I have, &c.

(signed) *E. W. Bonham.*The Earl Russell,
&c. &c. &c.

Enclosure 2, in No. 30.

Mr. *Baring*, M.P., to the Under Secretary of State for Foreign Affairs.

Sir,

India Office, S.W., 10 October 1863.

IN acknowledging the receipt of your letter, dated 2nd October 1863, I am directed by the Secretary of State for India in Council, to convey his thanks to Earl Russell for the accompanying copy of Mr. Bonham's letter relative to the probable completion of the railroad to Brindisi, and to state that it rests with Her Majesty's Postmaster General to determine whether, on the opening of the railway, that port shall be made use of for the transit of the Indian mails.

I am, &c.

(signed) *T. G. Baring.*The Under Secretary of State,
for Foreign Affairs.

No. 31.

Mr. *Baring*, M.P., to the Secretary to the Post Office.

Sir,

India Office, S.W., 10 October 1863.

WITH reference to my letter dated 20th December 1861, I am directed by the Secretary of State for India in Council to acquaint you, for the information of Her Majesty's Postmaster General, that he has learnt from a despatch of Her Majesty's consul at Naples, that the railroad to Brindisi will probably be opened in January 1864, and he requests to be informed whether, with reference to the importance of shortening as much as possible the time occupied in the transit of the mails to and from India, it is the intention of Lord Stanley of Alderley to make any change in the route of the Indian mails in consequence of the extension of railway communication to the south east coast of Italy.

I am, &c.

(signed) *T. G. Baring.*

The Secretary, General Post Office.

App. No. 1.

No. 32.

Mr. F. Hill to Mr. Hammond.

Sir,

General Post Office, 15 October 1863.

WITH reference to my letter of the 16th October 1862, I am directed by the Postmaster General to inquire whether Earl Russell has received from Her Majesty's minister at Turin, any further information respecting the terms on which, in the event of the mails between this country and India and Australia being forwarded *viâ* Ancona or Brindisi, the Italian Government would undertake the entire cost and responsibility of conveying those mails over the Italian territory, including the passage of Mont Cenis, and the employment whenever necessary of express trains; as well as the information asked for as to the number of hours in which the Italian Government would guarantee the complete transit of the mails to and from the French frontier.

If Lord Russell has not yet received a reply to these questions, Lord Stanley of Alderley will be glad if his Lordship will be good enough to write again to Her Majesty's Minister at Turin on the subject.

E. Hammond, Esq., Foreign Office.

(signed) F. Hill.

No. 33.

Mr. Hammond to Sir Rowland Hill.

Sir,

Foreign Office, 15 October 1863.

WITH reference to previous correspondence upon the subject of the transmission of the Indian Mails through Italy, I am directed by Earl Russell to inclose to you, for the consideration of the Postmaster General, a copy of a despatch from Her Majesty's Consul General at Naples, recommending that an Englishman should be appointed vice-consul at Brindisi, in the event of the Indian mails being sent by that port.

I am also to transmit to you a copy of a letter which has been received from the India Office upon this subject, and I am to request that you will move the Postmaster General, to inform Lord Russell of the decision he may come to in regard to the passage of the Indian Mail through Brindisi.

Sir Rowland Hill, K.C.B.
&c. &c. &c.I am, &c.
(signed) E. Hammond.

Enclosure 1, in No. 33.

(No. 56.—Consular.)

Mr. Bonham to Earl Russell.

My Lord,

Naples, 22 September 1863.

WITH reference to my Despatch No. 52, Consular, of 11th September, I have the honour to report to your Lordship that great progress is being made in the railway along the coast of the Adriatic, the works being, I am assured, in a forward state all along the line. It is already opened to Ortona, in the Abruzzi Litorale, and there seems reason to hope that it will be completed and opened to Foggia by the beginning of December, and to Brindisi in January 1864.

The postal authorities here believe that as soon as this line is opened, the Indian Mail will be sent by way of Brindisi instead of by Marseilles. Whether they have grounds for this belief, I am of course unable to say; but if such should be the intention of Her Majesty's Government, I would venture to submit to your lordship that it is very important the post of vice-consul at Brindisi should be occupied by an Englishman instead of by a native, as that port will in such case speedily become a place of importance, and the amount of English interests large.

The projected lines from hence to the Adriatic coast are unfortunately by no means in so forward a state, and it will, I fear, be some years before a direct communication can be completed between this coast and the Adriatic, owing to the great difficulty of crossing the Apennines.

The Earl Russell,
&c. &c. &c.I have, &c.
(signed) E. W. Bonham.

Enclosure 2, in No. 33.

Mr. Baring, M.P., to the Under Secretary of State for Foreign Affairs.

Sir,

India Office, S.W., 10 October 1863.

IN acknowledging the receipt of your letter dated 2nd October 1863, I am directed by the Secretary of State for India in Council to convey his thanks to Earl Russell for the accompanying copy of Mr. Bonham's letter relative to the probable completion of the railroad

railroad to Brindisi, and to state that it rests with Her Majesty's Postmaster General to determine whether, on the opening of the railway, that port shall be made use of for the transit of the Indian mails. App. No. 1.

The Under Secretary of State
for Foreign Affairs.

I am, &c.
(signed) *T. G. Baring.*

No. 34.

Mr. F. Hill to Mr. Hammond.

General Post Office, 21 October 1863.

Sir,
WITH reference to your letter of the 15th instant, I am directed by the Postmaster General to inform you that his lordship is unable to come to a decision on the question of forwarding the Indian mails through Italy, until he has ascertained the conditions on which the Italian Government would undertake the expense and responsibility of conveying those mails over the Italian territory, and the time in which they would guarantee the transit of the mails.

In my letter of the 16th October 1862 I requested that Earl Russell would be good enough to obtain information on these points through her Majesty's minister at Turin, and in my letter of the 15th instant, I renewed the request; and pending the receipt of such information, Lord Stanley of Alderley will defer making a definitive reply to the question asked in your letter.

E. Hammond, Esq.,
Foreign Office.

(signed) *F. Hill.*

No. 35.

Mr. Hammond to the Secretary to the Post Office.

Foreign Office, 17 February 1864.

Sir,
WITH reference to your letters of the 16th and 21st of October last, I am directed by Earl Russell to transmit to you herewith, for the information of Her Majesty's Postmaster General, a copy of a despatch from Her Majesty's minister at Turin, forwarding the reply of the Italian Government as to the terms and conditions on which they would undertake to forward through Italy the English mails for India and China.

I am, &c.
(signed) *E. Hammond.*

The Secretary
to the General Post Office.

P.S.—I am to request that the enclosures in Mr. Elliot's letter, which are sent in original, may be returned to this office when done with.

Enclosure 1, in No. 35.

(No. 32.)

The Hon. H. Elliot to Earl Russell.

My Lord,

Turin, 3 February 1864.

By your despatch No. 9, of 19th October last, your lordship instructed me to recall the attention of the Italian Government to the inquiries which had already been made by Her Majesty's Government respecting the terms and conditions upon which they would be disposed to undertake the conveyance of the mails between England and India and China through the Italian territory.

I have now received from the Italian Government the note of which I have the honour to enclose a copy, as well as a translation of its enclosure, in reply to these inquiries.

Your lordship will perceive from these documents that the Italian Government is willing to undertake the conveyance of the mails from St. Michel, in Savoy, including the crossing of Mont Cenis, at the following rates:—

To Ancona, 50 centimes per oz. of 30 grammes for letters, and per kilogramme for printed papers.

To Brindisi, 75 cents. per oz. for letters, and per kilogramme for printed papers

If Her Majesty's Government are disposed to make use of Italian steamers for the conveyance of the letters to Alexandria, this Government is prepared to take them at the rate of 40 cents. per oz. for letters, and per kilogramme for printed papers, guaranteeing a speed of 10 knots an hour; the proposed charge from Brindisi being apparently the same as that from Ancona, notwithstanding the considerably shorter distance of the passage from the former port.

The rates above given are upon the understanding that Her Majesty's Government guarantee a minimum weight of 664,000 ounces.

According to the enclosed statement the mail could be conveyed from London by Ancona to Alexandria in 170 hours, being a gain of 15 hours over the Marseilles route, and

App. No. 1.

when the railway at present under construction is open to Brindisi, the time to Alexandria from London would then be 154 hours, making a saving of 31 hours upon the Marseilles line.

The Earl Russell, K.G.

I have, &c.
(signed) H. Elliot.

Enclosure 2, in No. 35.

M. le Ministre,

Turin, 1 Février 1864.

PAR un office en date du 23 Octobre dernier vous avez exprimé au nom de votre Gouvernement le désir d'avoir au plutôt une réponse à la dernière communication de votre honorable prédécesseur concernant l'éventualité du passage de la malle des Indes à travers l'Italie, notamment de connaître à quel prix par once de lettres et par kilogramme d'imprimés l'Administration Italienne se chargerait, dans le cas prévu, du transport à tous ses frais de la malle des Indes de St. Michel (Savoie) à Ancône et *vice versa*, et en combien d'heures le parcours entre ces deux points pourrait s'effectuer.

La communication sus-mentionnée de Sir J. Hudson n'avait point été perdue de vue, mais le Département des Travaux Publics, avait pensé qu'il était préférable de remettre l'examen des détails pratiques de la question au moment où l'état d'avancement des travaux du chemin de fer du littoral Italien de l'Adriatique permettrait d'envisager la question du transit de la malle des Indes par le territoire Italien, non seulement au point de vue du transport de la malle à Ancône, mais aussi à celui du transport jusqu'à Brindisi, comme port d'embarquement.

La construction du dit chemin de fer a fait dans l'intervalle des progrès rapides; et l'Administration des Travaux Publics, de qui dépend aussi la Direction Générale des Postes, est occupée dès lors de recueillir les données et d'établir les calculs nécessaires pour répondre dans des termes positifs aux demandes que rappelle votre office précité. Le résultat de cette information se trouve consigné dans une note que j'ai l'honneur de vous adresser sous ce pli et dont le contenu me paraît de nature à satisfaire de la manière la plus complète les désirs exprimés à ce sujet par l'administration des postes Britanniques.

Vous y remarquerez, M. le Ministre, qu'en prenant pour base le poids net des lettres et imprimés contenus dans la malle des Indes, tel qu'il a été indiqué par la direction des postes Britanniques, l'Administration Italienne se chargerait de leur transport à tous ses frais, de St. Michel à Ancône et *vice versa*, au prix de 50 centimes par once (30 gra.) de lettres et par kilogramme d'imprimés; de St. Michel à Brindisi au prix de 75 centimes par once des lettres et par kilogramme d'imprimés.

Vous y verrez également qu'il, suivant les calculs de l'Administration Italienne, le transport de la malle des Indes pourrait s'effectuer, sans les cas de mauvais temps extraordinaires ou d'accidents imprévus, de Londres à Alexandrie d'Egypte en 170 heures par la voie de Ancône, et en 154 heures par la voie de Brindisi, tandis que le même trajet exige 185 heures par la voie actuelle de Marseille.

Enfin, vous remarquerez aussi dans la note ci-jointe que dans le cas où la direction des postes Anglaises serait disposée à se servir des paquebôts Italiens pour le transport de la malle des Indes d'Ancône ou de Brindisi à Alexandrie, l'Administration Italienne se chargerait encore du transport maritime au prix de 40 centimes par once de lettres et par kilogramme d'imprimés, en garantissant une vitesse moyenne semestrielle de 10 noeuds par heures.

Veillez agréer, &c.
(signé) M. Cerruti.
Pour le Ministre.

A l'Honorable Henry Elliot,
&c. &c. &c.

Enclosure 3, in No. 35.

(Translation.)

It was difficult till now to find a fitting opportunity of forwarding Her Britannic Majesty's note upon the transit of the Indian mail over Italian territory, without previously collecting all the required data to establish a starting point for negotiation upon a matter of such importance, and of evidently reciprocal advantage.

These were not to be obtained until after the opening of the Ancona Susa Line, which, though in activity for some time past, required some modification for the subsequent opening of the Foggia Susa Line, and for the opening of the important Brindisi Susa Line, which will soon take place.

In the aforesaid note of the British Legation, the English Government expresses a wish to know precisely the price which it would have to pay per ounce for despatches, and that per kilogramme for book-post in return for which the Italian Government would assume the responsibility and cost of transport of the Indian mail over Italian territory, inclusive of the Cenis Road, and express conveyance whenever required; as also to know in what time the transit would be performed and guaranteed to the French frontier.

Not to dwell upon the evident advantage which the Italian route presents for celerity, it remains only to explain the mode and means by which the transit of the same over Italian territory can be effected.

Admitting

Admitting the gross weight of the Indian mail adduced from the official data of the English post (marked A.) not to exceed three tons per journey, and that only in cases of conveyance of the Australian mail, this weight would amount to six tons. The Italian Government is of opinion that it might guarantee the transport from St. Michel to Susa in seven hours' time, excepting in the event of bad weather and extraordinary and exceptional accidents. Whenever, therefore, the British Government shall obtain from the French Government that the omnibus train which leaves Culoz at 9.35 a.m., and which is in correspondence with the trains which leave Paris at 8 p.m. of the preceding day, shall be required to arrive at St. Michel at 12.35 p.m., instead of 1.35 p.m. easily to be accomplished, as the distance is only 135 kilometres, a very advantageous combination would be obtained, whereby the Indian mail might, for instance, be despatched from London in the morning of the 4th, would arrive at St. Michel on the 5th, at 12.35 p.m.; at Ancona, the 6th, at noon; and at Alexandria on the 11th, at 7 a.m.; thus not employing more than 170 hours between London and Alexandria, whereas *viâ* Marseilles, not less than 185 hours are required, as shown in the accompanying Table:

App. No. 1.

<i>Viâ</i> MARSEILLES.				<i>Viâ</i> ANCONA.			
STATION.	Days.	Hours.		STATION.	Days.	Hours.	
Departure from London - -	3 Feb.	7.30 p.m.		Departure from London - -	4 Feb.	7.30 a.m.	
" from Marseilles - -	5 "	7 a.m.		" " Paris - -	4 "	8 p.m.	
Arrival in Alexandria - -	11 "	12 noon.		Arrival at St. Michel - -	5 "	12.30	
				Departure from St. Michel - -	5 "	1.0	
				Arrival Susa - -	5 "	8.0	
				Departure from Susa - -	5 "	8.30	
				Arrival Ancona - -	6 "	12 noon.	
				Departure from Ancona - -	6 "	3 p.m.	
				Arrival Alexandria - -	11 "	10 a.m.	
TOTAL - - -		185 hours.		TOTAL - - -		170 hours.	

In the direction from Ancona to Susa, express trains are required for the transport of the mail every journey, as there is now only one train which leaves Ancona in direct correspondence with that which leaves St. Michel for Paris at 12.35 p.m. In the supposition that the Indian mail from Alexandria be despatched on the 4th, it would arrive at Ancona on the 9th, about 7 a.m., and be forwarded by a special train not later than 12 noon, to arrive at St. Michel on the 10th, at 11 a.m., leaving by the express train at 12.35, to arrive on the morning of the 11th in Paris, and in London on the evening of the same day, whereas *viâ* Marseilles, it would not arrive before the morning of the 12th, as will be seen in the following Table, which shows that in the route from Ancona to London the Italian way also offers a decided advantage over that of Marseilles.

<i>Viâ</i> MARSEILLES.				<i>Viâ</i> ANCONA.			
STATIONS.	Days.	Hours.		STATIONS.	Days.	Hours.	
Departure from Alexandria - -	4 Feb.	12 noon.		Departure from Alexandria - -	4 Feb.	12 noon.	
Arrival Marseilles - - -	10 "	10 p.m.		Arrival Ancona - - -	9 "	7 a.m.	
" Paris - - -	11 "	6.30		" St. Michel - - -	10 "	11 "	
" London - - -	12 "	6.45 a.m.		" Paris - - -	11 "	6 "	
				" London - - -	11 "	5.45 p.m.	
TOTAL - - -		187 hours.		TOTAL - - -		174 hours.	

The advantage to the British Government thus proved in regard to celerity for the Indian mail *viâ* Italy, it now remains, in accordance with the request of the English Government, to establish a rate of charge for every ounce of despatches.

Taken for granted that the weight of letters and book-post contained in the mails to and from India averages, as stated by the English post office (reference B), 19,344 kilogrammes of despatches per annum, equal to 664,000 ounces and 108,000 kilogrammes book-post, the rate for transit which the British Government should pay to the Italian Government should not be less than 56 centimes for every ounce of despatches (30 grains), nor less than 50 centimes per kilogramme for book-post.

Hitherto we have treated upon hypothesis that the transport both to and from India should be by Italian steamers; but as we have said above, the land transit will eventually be as far as Brindisi, and it becomes necessary to give our attention to this circumstance, which will ensure an incontestable preference for the Italian transport of the Indian mail.

App. No. 1. We have said that the mail despatched from London on the morning of the 4th, would reach Ancona at noon on the 6th.

If we substitute the port of Brindisi, the mail arriving at Ancona at noon, and starting at 12:30, would reach Brindisi at 4 a.m. of the 7th.

The steamer would leave Brindisi about 7 a.m., and reach Alexandria on the 10th at 5 p.m., the distance from Brindisi to Alexandria being only 822 marine miles, and hence not more than 82 hours sea voyage.

By the following itinerary, it would result that the transport from London to Alexandria would not take more than 154 hours, and we may here observe that, when the line is provided with a double rail, a greater speed may be obtained :

STATION.	Days.	Hours.
Departure from London - - - -	4	7:30 a.m.
Arrival at Brindisi - - - - -	7	3 "
Departure from Brindisi - - - - -	7	7 "
Arrival at Alexandria - - - - -	10	5 "
TOTAL - - -		154 hours.

But even with the accomplishment of the Brindisi Line to St. Michel, the same necessity exists of trains extraordinary on the arrival of every Indian mail, which involves an increase of expenditure, and obliges the Italian Government to increase the rate of transit for the British Government of from 50 to 75 centimes for every ounce of despatches, and for every kilogramme of book-post.

In summing up what has been stated as the basis upon which the Italian Government would be disposed to treat with the British Government, we have the following results :

1st. The Italian Government would assume the charge and responsibility of conveying the Indian mail from St. Michel to Ancona, and *vice versa*, within 24 hours, and from St. Michel to Brindisi in 40 hours, save and except in bad weather or casualties.

2nd. The Italian Government also undertakes all expenditure required to ensure the transport of the Indian mail between St. Michel and Ancona or Brindisi; and in return the British Government will reimburse the Italian Government, as follows :

(a.) For the transport of the Indian mail, *via* St. Michel and Ancona, 50 centimes per ounce of despatches (30 grains), 50 centimes for book-post.

(b.) For the transport of the Indian mail, between St. Michel and Brindisi, 75 centimes per ounce for despatches, and 75 centimes per kilogramme for book-post.

These charges have been rated at the minimum, upon the basis that the net weight of the correspondence contained in the Indian mail for one month, and that the British Government will guarantee such weight at the lowest, for if less than 66,400 ounces of despatches the Italian Government would not be reimbursed for the actual outlay it would have to incur.

It is advisable to show that, as the Italian Government upon this important question is far from speculating upon the transit over its territory, a clause might be inserted in the conditions whereby the rights of transit should be subject to revisal after a period of two years; and if the requirement of express trains was not so frequent, and which is now the main outlay, a reduction might be practicable.

If, however, the British Government were not opposed to availing itself of the Italian steamers for the transport of the Indian mail between the ports of Ancona or Brindisi, and that of Alexandria, the Italian Government would also undertake the maritime conveyance, lowering the price to 40 centimes per ounce of despatches, and to 40 centimes per kilogramme of book-post, and would guarantee a medium speed in six months of ten knots per hour.

Should the above-stated basis be found by the British Government favourable to an understanding upon the matter the Italian Government would hope to avail itself of the opportunity for revising the postal convention with Great Britain, of the 12th December 1857, and obtaining a reciprocity of advantages in the reduction of the rates now paid for the transport of despatches by the British transatlantic steamer.

January 1864.

Enclosure 4, in No. 35.

ITINERARY of the Indian Mail between *London* and *Alexandria*, and *vice versa*.

O U T W A R D.

Via Marseilles.			Via Ancona.			Via Brindisi.		
STATIONS.	Days.	Hours.	STATIONS.	Days.	Hours.	STATIONS.	Days.	Hours.
Departure from London -	3 Feb.	7-30 p.m.	Departure from London	4 Feb.	7-30 a.m.	Departure from London	4 Feb.	7-30 a.m.
" " Marseilles	5 "	7 a.m.	" " Paris -	4 "	8 p.m.	Arrival Brindisi -	7 "	3 "
Arrival Alexandria	11 "	12 noon.	Arrival St. Michel	5 "	12-30 "	Departure Brindisi	7 "	7 "
			Departure St. Michel	5 "	1 "	Arrival Alexandria	10 "	5 p.m.
			Arrival Susa	5 "	8 "			
			Departure Susa	5 "	8-30 "			
			Arrival Ancona	6 "	12 noon.			
			Departure Ancona	6 "	3 p.m.			
			Arrival Alexandria	11 "	10 a.m.			
TOTAL - - -		185 hours.	TOTAL - - -		170 hours.	TOTAL - - -		152½ hours.

H O M E W A R D.

Via Marseilles.			Via Ancona.			Via Brindisi.		
STATIONS.	Date.	Hours.	STATIONS.	Date.	Hours.	STATIONS.	Date.	Hours.
Departure Alexandria -	4 Feb.	12 noon.	Departure Alexandria -	4 Feb.	12 noon.	Departure Alexandria -	4 Feb.	12 noon.
Arrival Marseilles -	10 "	10 p.m.	Arrival Ancona -	9 "	7 a.m.	Arrival Brindisi -	7 "	10 p.m.
" Paris -	11 "	6-30 "	" St. Michel	10 "	11 "	" St. Michel -	9 "	11 a.m.
" London -	12 "	6-15 a.m.	" Paris -	11 "	6 "	" Paris -	10 "	6 "
			" London -	11 "	5-45 "	" London -	10 "	5-45 p.m.
TOTAL - - -		187 hours.	TOTAL - - -		174 hours.	TOTAL - - -		150 hours.

Enclosure 5, in No. 35.

A.—STATEMENT of the average Number of Boxes despatched by each of the four Monthly Mails *via France*, to and from *India*, *China*, and *Australia*.

Approximate weight of each Box, its contents, and cubical measurement of each Mail.

FOR INDIA.

Mails Despatched.	Number of Boxes.	Gross Weight, Cubical Measurement.				
		Tons.	cwt.	qrs.	lbs.	English feet.
3rd day of every month -	89 - - - -	2	3	3	-	178
10th " " -	92 - - - -	2	2	1	-	184
18th " " -	87 - - - -	2	1	3	20	174
26th " " -	232 - - - -	6	4	3	9	670

FOR LONDON.

Mails on Arrival.	Number of Boxes.	Gross Weight, Cubical Measurement.				
		Tons.	cwt.	qrs.	lbs.	English feet.
4th day every month -	20 - - - -	-	12	1	3	40
12th " " -	53 - - - -	1	9	3	9	151
20th " " -	18 - - - -	-	11	1	-	36
27th " " -	27 - - - -	1	19	1	17	54

App. No. 1.

No. 36.

The Postmaster General to the Treasury.

My Lords,

General Post Office, 9 March 1864.

THE completion of the Italian Railway between Turin and Ancona has opened up a continuous and uninterrupted line of railway, with the exception of the break at Mont Cenis, between Calais and Ancona, and the Italian Government have made overtures, through Her Majesty's minister at Turin, for the conveyance by the route of Ancona of the Indian and Australian mails which are now forwarded *viâ* Marseilles.

Being impressed with the importance of shortening, to the utmost possible extent, the time occupied in the transit of these mails, I requested Earl Russell to obtain from the Italian Government the fullest information as to the facilities they were prepared to afford for the carriage of the mails between the Italian frontier of France and the port of Ancona, and as to the terms upon which they would undertake the entire cost and responsibility of conveying the mails over the Italian territory, including the passage of Mont Cenis, and the employment, whenever necessary, of special trains.

I also requested that the Italian Government might be asked to state the number of hours in which they would guarantee the complete transit of the mails to and from the French frontier.

From the reply which I have now received (a copy * of which I enclose) it appears that the utmost gain that could be effected at present in the transit of the mails by the route of Ancona over that of Marseilles, would not be more than 15 hours, and that even this gain would be in part dependent on the acceleration by the French Government of an omnibus train which leaves Culoz for St. Michel in correspondence with the night mail train from Paris.

A further extension of the Italian railway to Brindisi is now in progress, and, I understand, will soon be open, when a saving of 31 hours, as compared with the time occupied by the Marseilles route, may, it is stated, be effected; and under these circumstances, I am of opinion that it is not desirable at present to disturb the arrangements for the conveyance of the Indian and Australian mails; but that it will be better to continue their transmission by the route of Marseilles until the railway from Turin to Brindisi is complete and open for public traffic, when the subject can be again considered.

If you Lordships concur in this view, I will inform Earl Russell, and also Sir Charles Wood, with whom I have been in communication on the subject of the decision come to.

I have, &c.
(signed) Stanley of Alderley.

No. 37.

(3846—11—3.)

Mr. F. Peel, M.P., to the Postmaster-General.

My Lord,

Treasury Chambers, 12 March 1864.

I AM directed by the Lords Commissioners of Her Majesty's Treasury to acquaint you that my Lords have had before them your Lordship's letter of the 9th instant representing that the Italian Government have made overtures through Her Majesty's Minister at Turin for the conveyance by the route of Ancona of the Indian and Australian mails which are now forwarded *viâ* Marseilles. I am to state that my Lords concur with your Lordship in opinion that it is not desirable at present to disturb the arrangement for the conveyance of the Indian and Australian mails, but that it will be better to continue their transmission by the route of Marseilles until the railway from Turin to Brindisi is complete and open for public traffic, when the subject can be again considered.

I am to request that your Lordship will inform Earl Russell and Sir Charles Wood of this decision as proposed.

I am, &c.
(signed) F. Peel.

No. 38.

Mr. F. Hill to Mr. Hammond.

Sir,

General Post Office, 18 March 1864.

THE Postmaster General has had before him your letter of the 17th ultimo, in which you transmitted a copy of a despatch from Her Majesty's Minister at Turin, communicating the reply of the Italian Government as to the terms and conditions on which they would undertake to forward through Italy the English mails for India and China.

It appears, from Mr. Elliot's despatch, that the utmost gain that could be effected at present in the transit of the mails by the route of Ancona over that of Marseilles, would not

* See Letter No. 35, and Enclosures.

not be more than 15 hours, and that even this gain would be in part dependent on the acceleration by the French Government of an omnibus train which leaves Culoz for St. Michael in correspondence with the night mail train from Paris. A further extension of the Italian Railway to Brindisi is now in progress, and it is understood will soon be open, when a saving of 31 hours as compared with the time occupied by the Marseilles route, may, it is stated, be effected.

The Postmaster General has brought the whole subject under the consideration of the Lords of the Treasury, and, with their concurrence, he has decided not to disturb the present arrangement for the conveyance of the Indian and Australian mails, but to continue their transmission by the route of Marseilles until the railway from Turin to Brindisi is complete and open for public traffic, when the subject can be again considered.

Earl Russell will no doubt communicate this decision to the Italian Government.

E. Hammond, Esq.,
Foreign Office.

I am, &c.
(signed) *F. Hill.*

No. 39.

Mr. *F. Hill* to Mr. *Baring*, M.P.

Sir,

General Post Office, 18 March 1864.

THE Postmaster General duly had before him your letter of the 10th October last, in which, by direction of the Secretary of State for India in Council, you inquired whether it was his Lordship's intention to make any change in the route of the Indian mails, in consequence of the extension of railway communication to the South Eastern coast of Italy.

Before replying to that letter, Lord Stanley of Alderley thought it desirable to obtain from the Italian Government information as to the terms on which they would undertake to convey the Indian mails through Italy, and the number of hours in which they would guarantee the complete transit of those mails.

The information asked for has just been received through the Foreign Office, and it appears that the utmost gain that could be effected in the transit of the Indian mails by the route of Ancona over that of Marseilles would not be more than 15 hours, and that even this gain would be in part dependent on the acceleration by the French Government of an omnibus train which leaves Culoz for St. Michael in correspondence with the night mail train from Paris. A further extension of the Italian Railway to Brindisi is now in progress, and, it is understood, will soon be open, when a saving of 31 hours as compared with the time occupied by the Marseilles route may, it is stated, be effected.

Under these circumstances the Postmaster General has brought the whole subject under the consideration of the Lords of the Treasury, and, with their concurrence, he has decided not to disturb the present arrangement for the conveyance of the Indian and Australian mails, but to continue their transmission by the route of Marseilles until the railway from Turin to Brindisi is complete and open for public traffic, when the subject can be again considered.

T. G. Baring, Esq., M.P.,
&c. &c.
India Office.

I am, &c.
(signed) *F. Hill.*

No. 40.

Mr. *Hammond* to the Secretary of the Post Office.

Sir,

Foreign Office, 23 November 1864.

WITH reference to previous correspondence upon the subject of the proposal for the conveyance through Italy of the Indian mails, I am directed by Earl Russell to transmit to you for the consideration of the Postmaster General a copy of a Despatch from Her Majesty's Minister at Turin upon the same subject.

The Secretary to the General Post Office.

I am, &c.
(signed) *E. Hammond.*

Enclosure in No. 40.

(No. 289.)

The Honourable *H. Elliot* to Earl *Russell*.

My Lord,

Turin, 2 November 1864.

M. JACINI, the Minister of Public Works, expresses much anxiety to know whether Her Majesty's Government would now be disposed to resume the consideration of the Italian route for the mails between Great Britain and India.

He says that the works of the railroad as far as Brindisi are so nearly finished, that their completion can now be foreseen with tolerable accuracy, but that if they are to be calculated for the passage of an express train, such as that which should convey the Indian mail, it would be necessary to make certain preparations, for which it would be a convenience for him to have sufficient notice.

I said I would readily make known his wishes to Her Majesty's Government, but it

App. No. 1. appeared to me that it would be more convenient if the Italian Government would express in writing their wish that the question should be considered, stating precisely the period at which they could undertake to commence the service.

I did not understand M. Jacini to propose any change in the conditions which were forwarded to your Lordship in my Despatch, No. 32, of the 3d of February last, but he expressed himself as very ready to listen to any suggestions which might be made by Her Majesty's Government.

He said he could guarantee the line being in complete working order by the month of April next, and he expects it to be open for public traffic two months earlier.

The Earl Russell, K. G.

I have, &c.
(signed) H. Elliot.

No. 41.

Mr. Hammond to the Secretary to the Post Office.

Sir,

Foreign Office, 3 December 1864.

WITH reference to previous correspondence with regard to the question of the conveyance of the Indian mails through Italy, I am directed by Earl Russell to transmit to you herewith, to be laid before Her Majesty's Postmaster General, a copy of a Despatch from Her Majesty's Minister at Turin, forwarding a further communication from the Italian Government suggesting a fresh examination of their proposals.

The Secretary, General Post Office.

I am, &c.
(signed) E. Hammond.

Enclosure 1, in No. 41.

(No. 318.)

The Honourable H. Elliot to Earl Russell.

My Lord,

Turin, 23 November 1864.

I HAVE the honour to forward herewith the copy of a note from M. Cerruté, enclosing the extract of a communication from the Minister of Public Works, of which I likewise enclose a copy and translation, inquiring whether Her Majesty's Government would not now be disposed to enter upon an examination of the proposal for the conveyance of the Indian mails by the Italian route.

The Italian Government consider themselves able to engage that the distance from Susa to Brindisi shall be accomplished in 27 hours, as soon as the line is completed to the latter place, which time would by degrees be reduced to 24 hours, the speed in the first instance having only been calculated at about 23 miles an hour between Ancona and Brindisi.

In reply to my inquiries whether punctuality could be ensured over a distance of between 700 and 800 miles of single line of rail, I have been assured that it would be guaranteed, and that all the ordinary traffic would give way to the express trains carrying the Indian mails.

I have, &c.
(signed) H. Elliot.

Enclosure 2, in No. 41.

M. le Ministre,

Turin, 22 Novembre 1864.

PAR un office en date du 26 Mars dernier, vous avez bien voulu faire connaître au Gouvernement du Roi que celui de Sa Majesté Britannique n'était point pour le moment, dans l'intention de modifier les arrangements existants relativement au transport de la malle des Indes, mais qu'il se réservait de revenir sur le projet de faire transiter la dite malle par l'Italie lorsque le chemin de fer qui doit relier Turin à Brindisi serait terminé.

Je viens aujourd'hui de recevoir à ce sujet une communication de mon collègue au Département des Travaux Publics, de laquelle il résulte que les travaux de la dernière section de la ligne susdite approchent leur terme, qu'au printemps prochain l'Administration Italienne sera, selon toute probabilité, en mesure de se charger du transport de la malle des Indes de Suse à Brindisi, et que le trajet entier n'exigera tout d'abord que l'espace de 27 heures lequel pourra par suite être réduit à 24 heures.

Dans cet état de choses M. le Ministre des Travaux Publics pense que le moment serait venu d'inviter le Gouvernement Britannique à reprendre l'examen du projet en question, afin que dans le cas où il serait disposé à l'accueillir les deux Administrations puissent se concerter dès à présent et conclure les arrangements nécessaires au sujet du transport de la malle des Indes par la voie de Brindisi, dès que le chemin de fer fonctionnera jusqu'à ce port.

Je m'empresse, M. le Ministre, à vous remettre l'extrait ci-joint de la note de mon collègue en vous priant d'en communiquer le contenu à votre Gouvernement, et de m'informer, si comme nous l'aimons à espérer il partage l'avis de l'Administration Italienne touchant l'opportunité de préparer dès à présent un accord pour l'exécution d'un projet qui réclame à juste titre de sa part, comme de la notre, une attention spéciale.

The Honourable H. Elliot.

(signé) M. Cerruté.

Enclosure 3, in No. 41.

(Translation.)

EXTRACT from a Note from the Minister of Public Works to the Minister of Foreign Affairs, dated 19 November 1864.

THE certainty of being able shortly to open to public traffic the line of railway from Turin to Brindisi, and at the same time of consolidating the line from Turin to Ancona, allows us to hope that next spring we shall be enabled by means of express trains to effect the transport of the Indian mail across Italy, thereby saving much time in the transit between that distant country and London.

In order to be sure of my information I have thought it right to seek it of the different Companies who own the various divisions of the Adriatic Coast line, and I am informed that as far as the line between Brindisi and Ancona is concerned, no greater speed could be reckoned upon, at least at first, than that of 38 kilometres per hour by a fast express train, while for the transit from Ancona to Susa, by way of Bologna, Piacenza, and Turin, there would be no difficulty in attaining, or even in exceeding, the speed of 50 kilometres per hour.

Reckoning, therefore, from these data, we shall employ 15 hours to go from Brindisi to Ancona, and 12 more from Ancona to Turin and Susa, to which place the line would be complete through the whole of Italy. Therefore from Brindisi to Susa would occupy not more than 27 hours; a time which may gradually be reduced to 24 hours, when the first portion of the line as far as Ancona shall have been rendered strong enough to admit of the highest speed.

Knowing, therefore, the interest which an undertaking of such great importance from an international point of view must inspire, I hasten to bring to the knowledge of H. E. the Minister of Foreign Affairs the result of my inquiries, as I think that the moment is come for commencing negotiations between Great Britain and Italy for the attainment of this desirable result.

No. 42.

Mr. F. Hill to Mr. Howell.

Sir,

General Post Office, 9 January 1865.

THE Postmaster General has under consideration the question of transmitting the Indian, China, and Australian mails, by way of Brindisi, having been given to understand that the railroad from Turin will be open for traffic for the entire distance to Brindisi early in the ensuing spring.

I am desired by his Lordship to request that the Directors of the Peninsular and Oriental Steam Navigation Company will be good enough to inform him whether, in consideration of the reduced mileage which the vessels of the Company would then have to perform, the directors would be prepared to make a reduction in the amount of the subsidy now paid for the service, in the event of Brindisi being substituted for Marseilles, as the port for landing and embarking the Indian, &c., mails, and, if so, to what extent.

C. W. Howell, Esq., Peninsular and Oriental
Steam Navigation Company.

I have, &c.
(signed) F. Hill.

No. 43.

Mr. Howell to the Secretary to the Post Office.

Peninsular and Oriental Steam Navigation Company,
Offices 112, Leadenhall-street, London, E.C.,

Sir,

10 January 1865.

I HAVE the honour to acknowledge the receipt of your letter, dated 9th instant (No. 1178 P.), requesting that the Directors of this Company will state for the information of the Postmaster General whether, in consideration of the reduced mileage which the Company's vessels would have to perform in the event of Brindisi being substituted for Marseilles as the port for landing and embarking the overland mails, they would be prepared to make a reduction in the amount of the subsidy now paid for the service, and, if so, to what extent.

Having laid the same before the Board of Directors this day, I am instructed to state that they are unable to give a definite reply on the subject until they can obtain reliable information on the following points, viz.:

1. How far the port of Brindisi affords the necessary accommodation as a terminal station for a line of large steam vessels carrying Her Majesty's mails, in combination with a passenger and goods traffic.
2. How far the change of route contemplated may affect the revenue of the Company in respect to their commercial earnings by passengers, and freight on merchandize.

App. No. 1. The Directors will endeavour to possess themselves of this information as early as possible, when they will have the honour of again communicating with you.

The Secretary of the General Post Office.

I have, &c.
(signed) *C. W. Howell*,
Secretary.

No. 44.

(No. 70.)

Mr. *Hammond* to the Secretary to the Post Office.

Sir,

Foreign Office, 2 March 1865.

I AM directed by Earl Russell to transmit to you a copy of a despatch and its enclosure from Her Majesty's Minister at Turin, from which you will perceive that the Italian Government are desirous of learning whether Her Majesty's Government have come to any decision with regard to the transmission of the Indian mails by the Susa and Brindisi railroad, which line it appears will in a few weeks be in working order, and I am to request that, in laying these papers before the Postmaster General, you will move his Lordship to cause Lord Russell to be informed what answer should be returned to the Italian Government.

The Secretary to the Post Office.

I am, &c.
E. Hammond.

Enclosure 1, in No. 44.

(No. 70.)

The Honourable *H. Elliot* to Earl *Russell*.

My Lord,

Turin, 27 February 1865.

THE Italian Government is desirous of knowing whether Her Majesty's Government has come to any decision with regard to the transmission of the Indian mails by the Mont Cénis and Brindisi.

The Minister of Public Works has informed me in a letter, of which I have the honour to enclose a copy, that the line has already been passed all the way by a locomotive to Brindisi, and that in a few weeks it will be in a state to permit the opening of a special express trains.

The Earl Russell, K.G.

I have, &c.
(signed) *Henry Elliot*.

Enclosure 2, in No. 44.

M. le Ministre,

Turin, le 23 Février 1865.

LE locomotive est déjà arrivé jusqu'à Brindisi, et on m'annonce que vers la fin du mois prochain toute la grande ligne de Suse à Brindisi pourra être parcourue par le convoi ordinaire à petite et à moyenne vitesse; quelques semaines plus tard par des convois spéciaux de grande vitesse.

Je me hâte de transmettre à votre Excellence ces renseignements et je n'y ajoute pas autre chose, sachant très bien que vous êtes convaincu autant que moi qu'il est dans l'intérêt de nos deux pays de s'entendre définitivement au sujet du passage de la maille des Indes.

Agréé, &c.
(signé) *E. Jacini*.

No. 45.

Mr. *Hill* to Mr. *Hammond*.

Sir,

General Post Office, 6 March 1865.

IN reply to your letter of the 2d instant, I am directed by the Postmaster General to request that you will state to Earl Russell that he has written to the Peninsular and Oriental Steam Navigation Company, inquiring whether they will consent to a reduction in the amount of their subsidy, in the event of the Indian and Australian mails being embarked and disembarked at Brindisi, instead of at Marseilles, as this information is necessary to show the effect, in a pecuniary point of view, of transmitting those mails through Italy.

The Company have promised to give the subject full consideration, and it is understood that one or more of their principal officers will visit Brindisi shortly, and make such inquiries as they consider it necessary to make, before answering the question addressed to them.

Until the Postmaster General has obtained the information asked for, he is unable to report his opinion upon the proposed change of route.

E. Hammond, Esq., Foreign Office.

(signed) *F. Hill*.

No. 46.

Mr. *Hammond* to the Secretary to the Post Office.

Sir,
I AM directed by Earl Russell to transmit to you, for the information of the Postmaster General, a copy of a despatch from Her Majesty's Consul General at Naples, reporting that the railway from Bari to Brindisi was opened to the public on the 29th ultimo.

The Secretary, General Post Office.

I am, &c.
(signed) *E. Hammond.*

Enclosure in No. 46.

(No. 8.)

Mr. *Bonham* to Earl *Russell*.

Naples, 8 May 1865.

My Lord,
I HAVE the honour to report to your Lordship that the railway from Bari to Brindisi was opened to the public on the 29th of April, and two trains run daily between the above-mentioned towns.

The official opening or inauguration of this railroad is expected to be made by the King, or by His Royal Highness Prince Humbert, towards the end of this month.

By the completion of this extension, the line of railway from Brindisi to the north of Italy is now complete.

The Earl Russell, K.G.

I have, &c.
(signed) *E. W. Bonham.*

No. 47.

Mr. *Murray* to the Secretary to the Post Office.

Foreign Office, 13 July 1865.

Sir,
I AM directed by Earl Russell to transmit to you, herewith, a copy of a letter from the Italian Minister at this Court calling attention to the advantages which would result from the adoption of the route through Italy *via* Mont Cénis and Brindisi, for the transmission of the mails from this country to Her Majesty's East Indian possessions, and stating that the Government of Italy are prepared, should Her Majesty's Government desire to do so, to enter into negotiations for the purpose of establishing this line of communication; and I am to request that you will move the Postmaster General to take this letter into his consideration, and favour Lord Russell with his opinion thereupon.

The Secretary to the Post Office,
&c. &c. &c.

I am, &c.
(signed) *James Murray.*

Enclosure in No. 47.

The Marquis *d'Azeglio* to Earl *Russell*.

M. le Comte,

Londres, le 12 Juillet 1865, 49 Grosvenor-street.

LE Gouvernement du Roi m'ayant chargé de soumettre à l'attention de celui de Sa Majesté Britannique quelques nouvelles considérations sur les avantages qui présenterait pour les communications avec les Indes la voie d'Italie, j'ai cru ne pouvoir mieux faire que de les résumer ici aussi brièvement que possible. Le fait important sur lequel je dois en premier lieu appeler l'attention du Gouvernement est que grâce à l'activité qu'on a déployée en Italie, le port de Brindisi dans trois semaines sera déblayé au point de recevoir des navires du plus fort tonnage.

Une activité non moins grande ayant terminé le chemin de fer qui s'y relie, on peut depuis quelque temps parcourir en voie ferrée toute la distance de Suse à Brindisi, en n'ayant d'autre interruption depuis Calais, que le Mont Cénis, dont le service est fait même en ce moment d'une manière parfaite.

Le Gouvernement Italien est prêt à prendre en considération et à adopter toute suggestion qui pourrait lui être indiquée quant aux perfectionnements à introduire dans le système pour le parcours à travers l'Italie. Je veux dire là qu'on pourrait d'un commun accord fixer la vitesse moyenne des trains, établir les points d'arrêt des exprès; en un mot, combiner un ordre de choses qui serait satisfaisant pour tous les intéressés.

Beaucoup de ces améliorations sont rendues plus faciles dorénavant par la fusion qui vient d'avoir lieu des chemins de fer Italiens en trois grands groupes dépendant chacun d'une administration que leur est propre, et qui rend plus aisé d'arriver à une entente. Ces groupes fournissent par eux-mêmes des systèmes qui, outre le service intérieur du pays tel qu'il existait jusqu'ici, se présentent à des arrangements internationaux et commerciaux.

D'ailleurs toutes ces questions viennent se résoudre en une question d'argent, et du moment où le service permettra de fournir à la dépense d'express-trains, cela sera facile à arranger.

App. No. 1.

Au reste, dans l'état actuel des choses la durée du voyage entre Londres et Alexandrie d'Egypte est déjà diminuée de 15 heures en comparaison du trajet par Marseille.

Les sociétés particulières se mettent en avant pour établir des services de ce genre; mais cela constituerait en dernière analyse une espèce de monopole, et nous croyons qu'il vaudrait mieux que les deux Gouvernements s'entendent pour assurer plus positivement l'avantage de leurs nationaux.

Le Gouvernement Italien verrait donc avec plaisir qu'on envoie d'ici une personne versée en pareille matière, et que pourrait étudier la question sur les lieux, se rendre compte des perfectionnements dont elle est susceptible et les indiquer au Ministère des Travaux Publics à Florence, ce Commissaire serait assuré d'y trouver d'accueil plus favorable et le plus empressé.

Au reste, il me paraît oiseux de chercher à démontrer aux Administrations Anglaises une vérité aussi claire qu'il est de leur avantage de profiter, pour les Indes d'une voie immensément plus courte et plus sûre que celle par Marseille.

Quand-même ces administrations l'oublieraient le commerce élèverait la voix pour le leur rappeler indiquer la question c'est donc la résoudre, je me borne par conséquent à constater ici les bonnes intentions du Gouvernement Italien pour arriver à une entente.

Je viens avoir recours à vous, M. le Comte, pour obtenir des vos bienveillants offices la communication de ce mémoire au Board of Trade, et au Postmaster General, et vous d'agréer mes remerciements, j'ai l'honneur vous offrir les assurances de ma plus haute considération.

Mons. le Comte Russell.

(signé) D'Azeglio.

No. 48.

Mr. Hill to Mr. Murray.

Sir,

General Post Office, 26 July 1865.

REFERRING to your letter of the 13th instant, relative to the conveyance of the Indian mail through Italy, I am directed by the Postmaster General to state that he has not yet received the communication from the Peninsular and Oriental Steam Navigation Company mentioned in my letter of the 6th of March last, but that, irrespective of that communication, Lord Stanley of Alderley is of opinion that until the temporary railway which it is proposed to construct over Mont Cénis has been made and brought into use, it would be premature to discuss the question of sending the Indian mails by way of Italy.

So soon, however, as that work has been completed, his Lordship will with pleasure appoint some person in the Post Office, as suggested by the Marquis d'Azeglio, to meet an officer of the Italian Post Office, with a view to a full and careful examination of the whole subject, and in the confident hope that it will be found practicable to meet the wishes of the Italian Government, and, in doing so, to effect an important acceleration of the Indian mails.

Even if the saving of time mentioned by the Marquis d'Azeglio (15 hours) as practicable under present circumstances, could, as a general rule, be really made, or even if a considerably larger saving of time could be effected, Lord Stanley is of opinion that it would not be expedient to adopt the proposed route *via* Brindisi, or any other route through Italy, so long as the break at Mont Cénis continues, since this break would be sure to expose the mails to occasional delays, whereas, in postal matters, perfect regularity is of greater importance than increased average speed.

To the danger of delay at Mont Cénis must be added a like danger arising from the fact that much of the railway between Turin and Brindisi is single, a circumstance which would render it difficult to have express trains starting at unusual times when the railway was under repair, to maintain the speed even of ordinary trains.

James Murray, Esq., Foreign Office.

(signed) F. Hill.

No. 49.

Mr. Murray to the Secretary to the Post Office.

Sir,

Foreign Office, 3 August 1865.

WITH reference to your letter of the 26th ultimo, respecting the proposed adoption of the Italian route for the conveyance of the Indian mails, the substance of which will be communicated to the Italian Minister at this Court, I am directed by Earl Russell to request that you will inform Her Majesty's Postmaster General, that the Marquis d'Azeglio has expressed to his Lordship the desire of his Government that Her Majesty's Government should send an officer to survey the railway from Mont Cénis to Brindisi, and to make such observations as may occur to him for the information of Her Majesty's Government and for subsequent communication to the Italian Government.

Lord Russell is desirous of meeting the wishes of the Italian Government in this matter, and I am accordingly to request that you will state to Lord Stanley of Alderley, that Lord Russell would be glad to be informed what arrangements can be made in furtherance of this object, in order that his Lordship may inform the Marquis d'Azeglio.

To Secretary to the General Post Office.

I am, &c.
(signed) James Murray.

No. 50.

App. No. 1.

Mr. Murray to the Secretary to the Post Office.

Sir,

Foreign Office, 3 August 1865.

With reference to my other letter of this day's date, I am directed by Earl Russell to transmit to you, for the information of Her Majesty's Postmaster General, a copy of a Despatch from Her Majesty's Minister at Florence, together with its enclosure, reporting a conversation which he had had with the Italian Minister of Public Works, on the subject of Captain Roberts' report upon the capabilities of the Port of Brindisi, with reference to the proposed Italian route for the overland mail to India.

The Secretary to the Post Office.

I am &c.
(signed) James Murray.

Enclosure 1, in No. 50.

Mr. Herries to Earl Russell.

My Lord,

Florence, 14 July 1865.

With a view to the eventual transit of the Indian mails through Italy, Captain Roberts, in the service of the Peninsular and Oriental Steam Navigation Company, visited this country last month for the purpose of inquiring into the state of the railway recently opened to Brindisi, and more particularly as to the capabilities of that port. On his return from his tour of inspection, he came to Florence and communicated to the Minister of Public Works the result of his inquiries. Captain Roberts expressed a very favourable opinion of the natural advantages of the harbour of Brindisi, but he declared that it must be considerably deepened by the removal of mud before it could be entered by large ships; and he represented that the dredging operations then going on were being conducted in the most feeble and inefficient manner. He also pointed out the absolute necessity of constructing wharves, docks, and other accommodations, now wholly wanting, in order to render Brindisi available as a packet station for the Peninsular and Oriental Company's vessels.

He seemed convinced that none of these works would be completed for a very long time. I had a conversation on this subject a few days ago with M. Jacini, the Minister of Public Works, who told me that the impression left on his mind by his conversation with Mr. Roberts was that the Peninsular and Oriental Company had no desire to come to an understanding with the Italian Government.

He protested against what he termed the hasty judgment pronounced by that gentleman, and declared that many of his objections were already to a great extent removed. An improved system of dredging had, since his visit, been applied with great success, the result being that vessels drawing 16 feet of water could now enter the harbour without difficulty, and he anticipated that in the course of the next two or three months a depth of about 23 feet would be obtained. As to the other works, which he desired to carry out with the greatest rapidity, he observed that a previous concert with the Peninsular and Oriental Company would facilitate their execution, and he regretted the want of encouragement he had met with on the part of the Company.

He added, that in order practically to demonstrate the superiority of the Brindisi route, even now, over any other, he had made arrangements for the conveyance of mails between Brindisi and Alexandria, by the steamers of the Adriatic and Oriental Company (Italian) in connection with special trains to and from Susa. This new service is to begin on the 1st of September.

M. Jacini calculates that the time required for the journey between Brindisi and Susa will be about 27 hours, and on the whole distance, between Alexandria and London, he estimates the immediate saving of time at 15 hours for the homeward and 24 hours for the outward line, a gain which he believes may be increased to at least 20 hours one way and 30 the other.

At my request he has given me a memorandum on this subject, which I have the honour to transmit to your Lordship herewith.

The Earl Russell, K.G.

I have, &c.
(signed) Edward Herries.

Enclosure No. 2, in No. 50.

Port de Brindes et Chemin de Fer de Brindes à Ancône.

Notices Sommaires.

Florence, 22 Juillet 1865.

IL y a à Brindes un port extérieur, un port intérieur d'une profondeur de 7 à 12 mètres, et un canal qui réunit les deux ports, et qui a dû être creusé par des dragues. Etat actuel du port de Brindes.

Des à présent les travaux de draguage sont conduits au point que des gros bateaux à vapeur de 5 mètres de jaugeage peuvent entrer dans le port intérieur, qui comme tout le monde sait, est tout à fait à l'abri des vents et de tempêtes, et s'ancrer près du quai qui est en face du canal.

0.43.

x x 4

L'excavation

App. No. 1.

Travaux en cours
de construction.

L'excavation du canal et du port intérieur continue avec la plus grande activité. Quatre dragues à vapeur, deux remorqueurs à vapeur, deux porteurs, et un nombre compétent de barques à soupape travaillent pour creuser le canal d'entrée qui sépare le port extérieur du port intérieur, et aussi pour creuser les abords des quais afin d'obtenir 7 mètres et au delà de profondeur sur tous les points du canal, c'est-à-dire dans tout le parcours depuis la haute mer jusqu'aux quais du port intérieur, ce qu'on croit pouvoir obtenir dans le mois de Septembre ou d'Octobre prochain. Dans le mois d'Octobre prochain on aura achevé 100 mètres du nouveau quai en construction dans la partie est du port intérieur et qui sera porté à 260 mètres de longueur.

Dans le même mois le quai sera pourvu d'une grue de la portée de 10 tonnes.

Travaux qu'on
donnera aux
enchères très pro-
chainement.

1. Systemation du canal d'entrée dans le port intérieur par des murs solides et des quais commodes.
2. Construction de 500 à 600 mètres de quai dans le port intérieur, partie ouest.
3. Cloture de la Bocca di Puglia, de sorte que même le port extérieur deviendra parfaitement sûr.
4. Barrage de la Côte Marina, pour éviter les encombrements de terre du canal et du port intérieur.

Travaux en projet
et à l'étude.

1. Le Gouvernement est sur le point d'établir un service special pour signaler l'arrivée des paquebôts de la Société Adriatique-Orientale, afin que le convoi soit prêt à partir aussitôt que la malle des postes et les voyageurs auront débarqué.
2. Le projet d'un dock de réparation est à l'étude et le Gouvernement espère l'achever dans un an et demi.

Il y a plusieurs propositions pour des concessions de quais ou bassins flottants, des docks, magasins, etc., travaux sur lesquels on est sur le point de délibérer.

On étudie aussi pour établir un embranchement, partie ouest, d'un chemin de fer le long de port intérieur jusqu'à la Côte Guacina.

Chemin de Fer de Brindes à Ancône, Bologne, Suse.

Le chemin de fer de Brindes à Bologne est dans un bon état, et en voie de consolidation sur les tronçons de nouvelle construction.

Au 1^{er} Septembre prochain, un train special très accéléré, avec des wagons à lit et autres comforts, partira de Brindes en coincidence avec l'arrivée des bateaux d'Alexandrie d'Egypte, et fera le trajet de Brindes à Bologne en 19 heures, temps qui pourra encore être abrégé au fur et à mesure que le chemin de fer, qui vient d'être ouvert, aura atteint tous les perfectionnements nécessaires auxquels on travaille.

La ligne de Bologne à Suse est d'une ancienne construction, puisque tout a double voie, exceptés quelques courts intervalles sur la plus part desquels on est pour mettre une seconde voie. Le convoi pourra par consequence avoir la plus grande vitesse dont soit capable tout autre chemin de fer d'Europe.

Le parcours de route ordinaire de Suse à S. Michel par le Mont Cénis offre le passage le plus sûr, le plus commode, le plus regulier des Alps. Dans le cas où l'on pourrait y appliquer le système Fell, le temps de la traversée du Mont Cénis sera très sensiblement abrégé. Dans tous les cas, le voyage par les moyens ordinaires est susceptible de perfectionnement, soit par rapport aux commodités, soit par rapport à la vitesse.

De S. Michel à Culoz la Compagnie Victor Emmanuel serait disposée à établir un train special pour rejoindre les convois de lignes Françaises.

Par les convois exprès qu'on établira l'automne prochain de Brindisi à Ancône on gagnera déjà, sur le parcours d'Alexandrie à Londres, 15 heures sur Marseille en venant, et plus que 24 en allant à Alexandrie.

No. 51.

Mr. Scudamore to Mr. Hammond.

Sir,

General Post Office, 10 August 1865.

I HAVE laid before the Postmaster General your letter of the 3d instant, in which you state that the Italian Minister at this Court has expressed to Earl Russell the desire of his Government that Her Majesty's Government should send an officer to survey the railway from Mont Cénis to Brindisi, and to make such observations as may occur to him for the information of Her Majesty's Government and for subsequent communication to the Italian Government.

You add that Lord Russell is desirous of meeting the wishes of the Italian Government in this matter.

Considering the time which must necessarily elapse before this department could advantageously make use of the route of Brindisi for the transmission of the Indian mails, as explained in my letter of the 26th ult., Lord Stanley of Alderley does not see that any
useful

useful result would follow the sending of an officer, at the present time, to make the proposed survey of the Italian railway. It appears to his Lordship that the plan, which at the suggestion of the Marquis d'Azeglio, he expressed his intention to adopt, namely, that of appointing some person in the Post Office to meet an officer of the Italian Post Office, with the view to a careful examination of the whole subject as soon as the temporary railway over Mont Cenis has been made and brought into use, is the best that can be followed. Nevertheless, if the Marquis d'Azeglio will have the goodness to point out in what manner a survey at the present time can be made profitable, his Lordship will readily give the subject his further consideration.

(signed) *F. J. Scudamore.*

E. Hammond, Esq., Foreign Office.

No. 52.

Mr. *Layard*, M.P., to the Secretary to the Post Office.

Sir,

Foreign Office, 5 September 1865.

WITH reference to your letter of the 10th ultimo, I am directed by Earl Russell to transmit to you, for the information of Her Majesty's Postmaster General, a copy of a despatch from Her Majesty's Chargé d'Affaires at Florence, reporting that the Italian Government are prepared to grant to Mr. Fell the concession for constructing a railway over the Mont Cenis, as soon as he can obtain a similar concession from the French Government.

No. 37.

I am, &c.

The Secretary, General Post Office.

(signed) *A. H. Layard.*

Enclosure in No. 52.

(No. 37.)

Mr. *Herries* to Earl *Russell*.

My Lord,

Florence, 25 August 1865.

YOUR Lordship's despatch, marked separate, of 29th June, to Mr. Elliott, having been delivered to me by Count Arrivabene, I took an early opportunity of speaking to the Minister of Public Works in favour of Mr. Fell's projected railway over the Mount Cenis.

In conformity with your Lordship's instructions I took care to explain to M. Jacini that your Government, though recommending the scheme, were not prepared to undertake any official responsibility, either for its execution or its success.

M. Jacini informed me that the Italian engineers, appointed to examine Mr. Fell's system, having declared it to be practicable, the Italian Government were prepared to grant the desired concession to Mr. Fell, as soon as he could obtain a similar concession from the French Government.

He added, that he believed Mr. Fell had to encounter great opposition at Paris.

The direct mail service to and from Alexandria *via* Brindisi, for which, as I reported to your Lordship in my Despatch, No. 17, of 24th July, arrangements had been made, is postponed on account of cholera.

The Earl Russell.

I have, &c.

(signed) *Edward Herries.*

No. 53.

Mr. *Howell* to the Secretary to the Post Office.

Peninsular and Oriental Steam Navigation Company,
Offices, 122, Leadenhall-street, London; E.C.,

Sir,

14 September 1865.

REFERRING to your letter of 9th January last, and my reply of the following day, relative to the proposed transmission of the Indian, China, and Australian mails by way of Brindisi, I am instructed to inform you that the directors have given their best consideration to the matter, and are now in a position to furnish an answer to the question submitted to them by the Postmaster General, viz., to what extent the Company would be prepared to reduce the subsidy now paid for the Mediterranean service in the event of Brindisi being substituted for Marseilles as the port for landing and embarking the Indian mails.

In reply, I have the honour to state that the directors are of opinion that even in the event of the adoption of Brindisi as the terminus of the mail service, the greater portion of the passengers and cargo traffic would still follow the Marseilles route.

App. No. 1.

As his Lordship is aware, the subsidy paid to the company for the conveyance of the mails covers but a small portion of the expense of the service, the greater part of its cost being defrayed by the earnings of the steamers in freight and passage moneys.

To preserve this traffic, it will be necessary for the Company to continue the service between Marseilles and Alexandria, even though the mails should be conveyed by the Italian route, and the directors would not, therefore, feel justified in making any abatement from the total subsidy now paid to the company in the event of the substitution of Brindisi for Marseilles as the port in the Mediterranean for the landing and embarkation of the over-land mails.

With the view of obtaining the fullest and most reliable information possible on the state of the communication with Brindisi and the capabilities of that port, the directors instructed Captain W. H. Roberts, one of the senior commanders in the Company's service, and who has had great experience in the Mediterranean, to proceed to Italy for the purpose of obtaining information on those points, and I have now the honour to transmit to you copy of that officer's reports to the directors (A. and B.), together with a copy of a letter (C.) from Mr. J. Nervegna (brother of the British vice-consul at Brindisi), an Italian gentleman who possesses considerable knowledge of the locality, and is now on a visit to this country.

In case the Postmaster General should decide upon establishing a mail service between Brindisi and Alexandria, the directors presume that tenders will be invited in the usual manner, and they will be glad to have the opportunity of submitting proposals for the service.

They desire me to state, however, that owing to the difficulty of the communication with Brindisi, especially in the winter, at which season the largest number of passengers are proceeding to and from the East, the earnings of the steamers employed on the line would, doubtless, be very small, and, unlike most of the mail services carried on by this Company, the cost of the service would have to be borne almost entirely by the subsidy.

To the Secretary of the
General Post Office.

I have, &c.
(signed) C. W. Howell,
Secretary.

Enclosure 1, in No. 53.

(A.)

From Captain Roberts to Peninsular and Oriental Steam Navigation Company.

Peninsular and Oriental Steam Navigation Company,
Offices, 112, Leadenhall-street, London, E.C.,
29 July 1865.

Gentlemen,

In submitting for your perusal a report upon the railway communication throughout Italy, and the present state of the port of Brindisi, I beg leave to express the general conclusions I have arrived at in respect to the establishment of an Indian mail service through that country; the small Italian railway map appended hereto will much facilitate the examination of the subject.

It can be seen at a glance that the railway system of Italy is at present separated from all other Continental states, excepting the tortuous line connecting Venice with Vienna; this, it may be safely assumed, is too much in an easterly direction to offer any advantages over the route *viâ* Marseilles.

The diligence communication maintained between France and Italy over Mont Cenis has always been subject to delays and interruptions during the winter season, notwithstanding the excellent organisation of this service by the Messageries Impériales; this being the case, the English engineer, Mr. Fell, has been allowed to lay down an experimental line upon the outer edge of the Mont Cenis road, one English mile and a quarter in length, on a system which is calculated to overcome the extraordinary but unavoidable gradient of 1 in 12.

This short line has been travelled upon by competent professional men, and is favourably spoken of (*see* also the Report of Captain Tyler, R. E., published in the "Times" of 29th June).

The next important step in hand is to obtain the joint permission of the French and Italian Governments to occupy the outer third of the road with this mountain railway, the length of which would be 48 English miles. Up to the middle of June, however, the consent of the two Governments to this scheme had not been formally obtained.

Having made careful inquiries I am satisfied that at least a year will be occupied in the construction of this railway, counting, of course, from the date of the formal permission being granted.

It is stated that the line in construction between Bolzano and Innsbruck, to effect a junction with the German lines, will be completed in about two years from the present time; all other Italian railways pointing northwards are under discussion; conflicting interests prevent decided action with respect to these lines; it is, therefore, quite evident that a permanent and certain communication for the Indian mails throughout the year depends upon

upon the completion and successful working of Mr. Fell's scheme, or the junction of Bologna and Innsbruck.

The port of Brindisi is still in its primitive state; the only thing accomplished is the removal of about 5 per cent. of the muddy deposit, which must be cleared out to render the harbour practically available. None of the projected plans, including breakwater, quays, and dry docks, have been commenced; there is, consequently, nothing done to meet the actual requirements of a mail line.

From its position, this port would naturally become the terminal point or station of the steam ships employed in such a branch of the Indian mail service; no trade, however, exists to assist in meeting the expenditure involved in the maintenance of an efficient main line.

Considering the sanguine views entertained by the Italians as to the future of Brindisi, it is to me a matter of surprise that the Government determined to establish the railway at this port (opened last May), and failed in prosecuting, at the same time, the necessary works for rendering an excellent harbour available. Until this is done, no practical views can be entertained for the punctual and efficient performance of a British mail service, *via* Brindisi.

To meet the requirements of all mail contracts a dry dock cannot be dispensed with, and the only one available on this line at Alexandria is much too short for even ordinary steamers of 800 tons.

I remain, &c.
(signed) *W. H. Roberts.*

To the Managing Directors.

Enclosure 2, in No. 53.

COPY of the REPORT of Captain *W. H. Roberts*, Commander in the Peninsular and Oriental Steam Navigation Company's Service, to the Directors of the Company.

Peninsular and Oriental Steam Navigation Company's Offices,
London, 25 July 1865.

Gentlemen,

I HAVE the honour to report that, in compliance with your instructions of the 17th of May, I left Marseilles for Italy on the 27th of that month, and have made a general examination of the railways and ports which are likely to be brought into future connection, either directly or indirectly, with the Overland route to India.

Proceeding coastwise, the double line of railway is in good working order between Marseilles and Toulon. From thence to Nice the embankment and tunnels are adapted for a double line, but at present only a single line is complete.

From Nice to Genoa, the railway works follow strictly a coast line; the mountains of the Maritime Alps here strike abruptly into the sea, and spread themselves along the entire coast, even beyond Genoa; the rugged nature of ravines and inequality of surface naturally involve a formidable amount of labour and expenditure of money in the construction of this single line. The tunnels, 77 in number, are for a single line only, and are all but completed. The entire absence of level ground, however, between them still leaves heavy work to be done, such as will take four or five years to finish when the works, now suspended, are recommenced; and, in consequence of the line being a series of curves, the speed of the fastest trains will not probably exceed an average of 15 English miles per hour between Nice and Genoa.

From Genoa to Spezia, the works of this single line are also suspended.

The British consul at Genoa expresses an opinion quite unfavourable to an early completion of it; he stated that uncertainty prevailed concerning future operations; this opinion coincided with that of the Marquis Serra Cassano, administrator of the railway works of the Riviera. He informed me that the Italian company holding the contract had met with the greatest difficulties near Spezia, the mountains to be tunnelled being formed of exceedingly hard stone, which the steam machinery brought from England had failed to break; also, that geological formations led them to believe that the fresh water observable in the Gulf of Spezia takes its source from reservoirs in the mountain ranges likely to be pierced by the present scheme. A formal meeting of the contractors and Government officers was to be held on the 12th of June to deliberate upon the advisability of making a detour inland, so as to avoid the present difficulties. His Excellency, however, added that, in his opinion, no railway communication between Genoa and Spezia will be established before the year 1870.

On arrival at Spezia, I made a cursory examination of the works, and was satisfied that they were really abandoned for the present.

The railway from Leghorn to Nunziatella is a single line; the rails are not fished at the ends to each other. This is an exception to all other lines I travelled upon in Italy.

From Nunziatella to Civita Vecchia a break occurs of 42 English miles. This portion of the line, I was informed when at Rome, is guaranteed by the concessionaire to be finished by December 1866. I observed placards inviting sub-contractors to tender forthwith for any portions of the line in question.

From Civita Vecchia to Rome the railway is a double line, in good working condition.

From Rome to Naples is a single line in good working order, the ends of rails being properly fished to each other in the usual manner.

The railway along the French and Italian coasts will be a single line only.

Will take four or five years to finish, and when completed the speed will be unequal to the requirements of a mail service.

From Genoa to Spezia.

From Genoa to Spezia a railway communication may possibly be established in 1870.

From Nunziatella to Civita Vecchia the line is to be completed in December 1866

App. No 1.

The port of Naples.

With respect to the port of Naples, the deepest part of the port is within the Mole, near the entrance. The space adapted for ships drawing 20 feet of water is very limited, and is usually occupied by Italian men-of-war. A large mail ship would of necessity bring up a little outside the entrance. Any occasional difficulty of bad weather could be overcome by the use of a steam-tug, to land and receive mails and passengers.

The only dry dock at Naples is 223 feet long.

The only dry dock of this port is within the arsenal, an old stone construction, having keel blocks upon the old plan. The dock is closed by a caisson, and the entire length thus enclosed is 223 feet.

Naples and Ancona through Rome will have railway communication with each other at termination of the year 1865.

In describing the present and future prospects in respect to a mail communication *via* Naples, it is necessary to add that a single railway line is in progress between Corese Orte Fuligno and Ancona, which it is confidently affirmed will be completed in December of this year; the west and east coasts will thereby be connected. It is stated, however, by an experienced Italian engineer that the probable speed will not exceed 15 English miles per hour, as the inclines are very heavy across the Apennines.

The present communication over Mont Cenis is regular during fine weather.

The regular communication between France and Italy by Mont Cenis is three times each way per 24 hours, and is performed by the diligences of the Messageries Impériales between St. Michell and Susa. Other subordinate communications are kept up daily. The time usually taken by the Messageries Impériales, under favourable circumstances, varies between eight and ten hours. The length of road is 81 kilomètres, or 50 English statute miles, maintained in excellent condition.

Mr. Fell's experiment favourably spoken of will occupy at least a year to complete counting from time of concession which had not been obtained in middle of June last (1865). The railway from Susa to Bologna not at present in good order.

The present interesting experiment of Mr. Fell is working upon the outer edge of the road, on the French side of the mountain, a short distance above Lanslebourg. In addition to the detailed report thereon by Captain Tyler, R.E., to the Board of Trade, published in the "Times" of the 29th of June, I have heard it favourably spoken of by French engineers and others. It is considered probable that Mr. Fell, who is supported by the influence of Sir James Hudson with the Italian Government, will very shortly obtain the necessary concession from the two Governments to construct his single line of railway over Mont Cenis. I was informed by an English engineer at Turin connected with Mr. Fell, that a year's hard work would probably accomplish the laying down of the permanent way.

From Susa to Turin is a good single line of railway, the material well laid, and the rails fished to each other in the usual manner. Distance from Susa to Turin 54 kilomètres, or 33½ English statute miles.

The Italian company, now occupying the entire line between Susa and Bologna, have but lately (about two months) been in possession of the greater portion of it. Their managing engineer, Monsieur Amilhau, a French gentleman, informed me that much of the permanent way was not in good order, and that he did not expect to complete all proper repairs under two years. He was nevertheless satisfied that within a few months an average speed of 40 kilomètres, or 25 English miles, including stoppages, could be established.

From Turin to Alessandria is a double line of railway, through a generally level country, without tunnels. From thence to Bologna is a single line, having an embankment for a double line of rails; the inclines are small, and the line otherwise adapted for a good average speed. The distance from Turin to Bologna is 335 kilomètres, or 208 English miles.

From Bologna to Brindisi is a single line of railway; no embankment or other arrangement made for a double line, excepting that the first of the three tunnels on the line (being a little south of Pesaro) has a double set of rails laid down throughout its length, and is used as occasion requires. I was informed by Signor Ruva, the engineer and manager of the whole line, at present residing at Foggia, that all the sleepers of the permanent way were impregnated with creosote. I observed likewise that all the ends of the rails are fished to each other in the usual manner, and therefore infer from general appearances that the line is well conditioned throughout its whole length. This gentleman also stated that he intended running the direct or express trains at an average of 45 kilomètres, or 28 English miles, per hour, the whole length of their line, that is from Brindisi to Bologna, and *vice versa*, commencing in May next, the present low rate of speed being simply a precautionary measure to allow time for the settling of the line, and the necessary experience to be acquired by a staff for the most part new to the operations of a railway. He felt confident that four direct trains per 24 hours could be established next spring at intervals of six hours, and that special arrangements would be willingly entered into by both railway companies to prevent unnecessary delay of the English mails throughout these Italian lines from Brindisi to Susa.

It is here necessary to note, that from Ortona to Vasto, a distance of 46 kilomètres, or 28 English miles, the embankment skirting the sea-coast is not in good order. I observed, however, that adequate work was progressing to remedy all that appears to be faulty.

THE PORT OF BRINDISI.

The port of Brindisi is in its primitive state.

The greater part of the outer harbour is exposed, more particularly to gales from the north-east. The Petagne Islands are too distant to check completely the swell produced by this and other winds from a northerly direction.

I am of opinion that two breakwaters at least are absolutely necessary for the security of this outer port, one to join the quarantine or Fort Island to the mainland, and the other to be

be thrown out in an easterly direction from Fort Island. Without these improvements easy and certain communication, under all circumstances of wind and weather, would not exist, a primary necessity for any important mail service.

The formation of the inner harbour ensures smooth water under all circumstances of wind and weather, presenting thus far every natural advantage for a mail service. In its present state, however, neither branch of this inner harbour is available, in consequence of the accumulation of mud during many ages, which has reduced the depth of water much below the requirements of steam-ships. I was informed by good authority at Brindisi that dredging operations commenced the middle of last March. As a fair estimate, I am of opinion that the quantity of muddy deposit removed does not exceed 5 per cent. of the entire work necessary to give an uniform depth of seven mètres, or 22 feet 11 inches English, throughout the two branches of the inner harbour. This rough estimate is based upon the soundings I noted when accompanied by Louis Cafiero, the Government pilot, also upon personal observations at other times.

It is evidently in the interests of this valuable port that the work of dredging should be pursued with renewed vigour. Extra labour could with great advantage be employed during the summer months, thus increasing the present limited means applied to this most urgent necessity.

The indispensable appendage of a dry dock to a mail port does not exist; an abundance of material is, however, at hand to form first-class docks. The termination of the eastern or smaller branch naturally offers every facility for such a work, which should be commenced at once; the deepening of the port and construction of dry docks would thus progress together.

There is a tendency in Italy to originate plans having for their object many important improvements for the general welfare of the country. Upon the adoption, however, of such plans, the practical working out of the same is either neglected or imperfectly attended to: the consequence is, with a people having but little experience in such matters, that exaggerated notions prevail as to the rate of progress made, especially in the matter of public works, the port of Brindisi included. In fact, no project of any kind had been commenced there up to the 13th of last month, except the dredging already alluded to, which is in the hands of a French contractor, who up to that time was taking matters very easily.

During interviews in Florence with Signor Jacini, the Minister of Public Works, I ventured to point out the little that had really been done, and, above all, the necessity of constructing dry docks and quays without further delay. His replies were in substance that the Italian Government was deficient of money, and that the better plan would be for the company to make a dock in accordance with their own necessities, he having a grant of six millions of francs, to be expended at the rate of a million and a half per annum in works for the improvement of this port. He was of opinion that the Italian Government would readily facilitate all arrangements having in view the establishment of the company's ships at Brindisi, and reminded me that the Government was at present still unfettered with contractors, and for his part he preferred entering into arrangements with a company whose interests would evidently be connected with the port rather than with contractors whose principal object was pecuniary profit.

On my return from Brindisi I wrote the Minister, at his own request, a summary of my intended report, a copy of which is hereto annexed.

No dry dock existing or even commenced.

Very little done up to 13 June 1865.

The Minister of Public Works would prefer that the Company should undertake the construction of dry docks rather than contractors.

Has 60,000 l. to expend per annum in works of this port.

To the Managing Directors.

I have, &c.
(signed) *W. H. Roberts.*

To His Excellency the Minister of Public Works, Florence.

21 June 1865.

Sir,
HAvING had, during my interviews with your Excellency, the honour of explaining the nature and purport of my visit to this country, under instructions from the Board of Directors of the Peninsular and Oriental Steam Navigation Company, I take the liberty of submitting for your Excellency's information the substance of a report which I shall have to lay before these gentlemen on my return to London, having special reference to the railway between Bologna, Ancona and Brindisi, and the local advantages of the latter port as a point of departure and arrival for the ships of the Indian, China, and Australian mail services.

The railway is a single line throughout its entire length from Brindisi to Bologna, and appears to be well constructed, the material being sound and substantial. The average speed I experienced accorded with that of the advertised rate, viz., about 30 kilomètres, or 19 English statute miles per hour for direct trains, and about 25 kilomètres, or about 15½ English statute miles per hour for omnibus trains.

Signor Ruva informed me that about May next he intended to increase the speed of the trains very considerably, say 45 kilomètres, or 28 English statute miles per hour, including stoppages, for direct trains, and a proportionate increase for omnibus trains.

During my stay at Brindisi of three and a half days I made a personal examination of the outer and inner harbours. The result has satisfied me that the port is easy of access at night time for steamships, and the three lights are well placed for guiding ships of any class or size into port under adverse circumstances, such as dark blowy weather.

At present the outer port is not available for the permanent use of steamships requiring easy and secure communication with the shore, a primary necessity in respect to an important

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mail service. To insure these requirements under all circumstances of wind and weather, breakwaters and quays must be constructed, none of which are commenced up to this date.

The formation of the inner harbour ensures smooth water under all circumstances of wind and weather, presenting thus far every natural advantage for a mail service. In its present state, however, neither branch of this inner harbour is available, in consequence of the accumulated mud of ages, which has reduced the depth of water much below the requirements of steamships. I was informed by competent authority at Brindisi that dredging operations commenced the middle of last March. As a fair estimate, I am of opinion that the quantity of muddy deposit removed does not exceed 5 per cent. of the entire quantity necessary to give an uniform depth of seven mètres, or 22 feet 11 inches English, throughout the two branches of the inner harbour. This rough estimate is based upon the soundings I noted when accompanied by Louis Cafiera, the Government pilot, also upon personal observation at other times. It is evidently in the interests of this valuable port that the work of dredging should be pursued with renewed vigour. Extra labour could be with great advantage employed during the summer months, thus increasing the present limited means applied to this most urgent necessity.

The indispensable appendage of a dry dock to a mail port does not exist; an abundance of material is, however, at hand to form first-class docks. The termination of the Eastern or smaller branch naturally offers every facility for such a work, which should be commenced at once. The deepening of the port and construction of dry docks would thus progress together, and in a comparatively short time render available a port second to none for the great commerce of the eastern world.

I remain, &c.
(signed) W. H. Roberts.

Enclosure 3, in No. 53.

(B.)

From Captain *Roberts* to the Peninsular and Oriental Steam Navigation Company.

Gentlemen,

Burton, Bridport, 8 September 1865.

It has occurred to me since I left London on the 30th ultimo, that a few words at the present time on paper, respecting the Brindisi route, may not be out of place.

We know that the Italians are doing all in their power to engage the attention of the British public, in the interests of the Brindisi route, which can, without a doubt, be so perfected as to become the most expeditious communication between London and Alexandria. At present the loose statements of newspaper correspondents, casual travellers, and directly interested persons, tend to deceive the public in respect to the practical state of things. It would, therefore, be a move in the right direction if the Postmaster General were to send a competent employé to reside at the Hotel Impérial at Lansebourg (situated at the base of the mountain on the French side), during the ensuing four or six months, to note the time taken for each daily mail service by the diligence over Mont Cenis. An intimate knowledge might thus be obtained directly by the Government of the delays and difficulties experienced during one winter, and in this way a sound judgment can be arrived at concerning the disputed point, whether a punctual communication is kept up during the winter months between France and Italy over Mont Cenis or not. I fully believe that inquiries made on the spot could not produce reliable information, as the interests, fancied or real, of the inhabitants would only bring about conflicting statements; hence the necessity, therefore, of the plan I propose.

If the diligence communication is not found sufficiently regular, the public must patiently abide the completion of Mr. Fell's proposed mountain railway, which will occupy more than a year in construction, counting from the time that the concession from the French and Italian Governments shall be obtained.

The railway from Susa (the Italian side of the mountain) to Brindisi is 714 miles in length; there is really no difficulties to be met with in this part of the communication; sleeping cars, I know, are being made to ameliorate the fatigue of the journey.

As to the port of Brindisi, the Italian Government is inclined to overvalue its importance, and as the reduction of the military expenditure is determined upon, their increased activity at this port is likely to continue.

The time occupied is now the invariable standard applied in testing these matters. It stands thus:—

	Hrs.	Min.
London Bridge to St. Michel	23	40
St. Michel over Mount Cenis (50 miles) to Susa	9	40
Susa to Brindisi, 714 miles, at 25 miles per hour	28	30
Transporting mails from railway to mail steamer	1	30
From Brindisi to Alexandria, 825 miles, at 11½ knots	72	0
Hours	140	20

Or

Or 5 days, 20 hours, 20 minutes. In a general way, we may say that the communication *viâ* Marseilles is about eight days. It behoves us, I think, to examine from time to time the state of this question.

The Indian overland mails leave London Bridge at eight p.m., and would, by the Brindisi route, arrive at Alexandria about five p.m. of the sixth day, in time to be forwarded forthwith by railway train to Suez.

The Managing Directors of the
Peninsular and Oriental Steam Navigation Company.

I am, &c.
(signed) *W. H. Roberts.*

Enclosure 4, in No. 53.

(C.)

From *J. Nervegna*, Esq., Brother to Her Britannic Majesty's Vice Consul, Brindisi.

To the Managing Directors of the
Peninsular and Oriental Steam Navigation Company,
London.

Gentlemen,

I HAVE attentively read the Report of Captain Roberts about the Italian railways and the port of Brindisi. I am not of his opinion about the actual state of the said port, which he thinks not suitable "for the requirements of mail steamers." I have been agent for the Austrian Lloyd from 1847 to 1860, during which period of 13 years the Lloyd's steamers came twice a week to Brindisi, and anchored at the outer harbour, and I never remember that they were once prevented landing mails or passengers on account of rough sea, and the service was always regularly carried on.

This one fact is sufficient to confute Captain Roberts' opinion, "that so long as the port of Brindisi remains as it is now, no practical views can be entertained for the punctual and efficient performance of a British mail service."

The last news I have from Brindisi are, that in a few months there will be 20 feet depth of water at the canal between the two harbours; and, therefore, your steamers being able to go into the inner harbour, the assertion of Captain Roberts, "that a certain and easy communication under all circumstances of wind and weather, which is the primary necessity for any important mail service, is not possible," would entirely disappear.

Speaking plainly, it seems to me that you are very indifferent, and look very coldly at the project made to you, of establishing a weekly communication, by swift and not too large steamers, between Brindisi and Alexandria.

I think the matter is worthy of a great deal more consideration than you imagine.

That is the shortest route from India, China, Australia, to England, therefore it is not only to be considered in its detached importance, or in its isolated profit, but as an auxiliary, and a completing of your lines in Asia, by which you would enjoy an undisputable advantage over the French steamers, being able to offer a shorter, more agreeable, and less expensive route to passengers and mails.

The Italian Government being at present well disposed to encourage your company in every way in facilitating the establishment of such a communication, I think this is the true time to ask of it, and get from it, all you may require, and which, perhaps, will be too late to be obtained if you do not quickly decide.

I think it is indispensable to get from the Italian Government a part of the inner harbour, or the so called "*Fiume Piccolo*," to make there a dry dock, and all buildings required for an important maritime establishment; I say important, for the following reasons:—

The Italian Government has no dry dock wherein to repair its men-of-war; that it is obliged to send to France; but if Brindisi would offer sufficient accommodations, no doubt the Italian Government would avail itself of them, and it would be advisable to try if the said Government would be disposed to grant a certain yearly amount of work to the company.

Besides which, Brindisi being situated at the entrance to the Adriatic and opposite to Greece, would afford great advantages both to Italian and Greek shipowners, and, perhaps, to Dalmatian also, to repair there their vessels, if they can be supplied with every want.

My conclusion is, therefore—

1st. Brindisi and its port are suitable and adapted for the performance of a mail service.

2nd. To establish, as soon as possible, a line of steamers between Alexandria and Brindisi, by which the company can strike the strong competition of the French steamers, and avoid another new company to be formed (as is whispered).

3rd. The building of a dry dock ought to be considered not only necessary, or useful, for the wants of the company, but in itself would be a good speculation, as I said above.

Brindisi, 22 August 1865.

I remain, &c.
(signed) *J. Nervegna.*

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No. 54.

Mr. *Allan* to the Secretary to the Post Office.

Peninsular and Oriental Steam Navigation Company,
 Offices, 122, Leadenhall-street, London, E.C.,
 5 October 1865.

Sir,

REFERRING to the documents which I had the honour to transmit to you on 14th ultimo, relative to the proposed adoption of Brindisi as the port for landing and embarking the Indian mails, I am now desired by the directors to enclose a Table which has been prepared by Captain W. H. Roberts, the gentleman deputed to visit Italy for the purpose of reporting on the subject, containing a variety of information relative to the communication between London and Brindisi, which the directors think may be interesting to the Postmaster General.

The Secretary of the General Post Office.

I have, &c.
 (signed) *Jas. Allan.*

Enclosure in No. 54.

THE MAIL, or "Direct" Communication at present between *London* and *Brindisi*, through *Paris*, *Macon*, *St. Michel* over *Mont Cenis*, through *Turin*, *Alessandria*, *Piacenza*, *Bologna*, *Ancona*, *Foggia*, and *Bari*, is once every 24 hours, the full particulars, if we commence with a day of the week, are as follows: Time occupied, 71 hours 33 minutes; length of the journey, 1,494 miles.

NAMES OF STATIONS.	—	Times of Departures and Arrivals.	Details of the Division of Time <i>en route</i> , and Sum Total.	Distance of each Station in English Miles from London.	Average Rate travelled per Hour on each Railway Line.
From London - - -	Monday, at	H. m.	H. m.	Miles.	Miles.
Arrive at Paris - - -	" -	7 30 a.m.	10 30	313	29.81
Stop " - - -	" -	- -	2 40	3	
Leave " - - -	" -	8 40 "	Railways apart.		
Arrive at Montereau - - -	" -	10 18 "	1 38	365	
Stop " - - -	" -	- -	0 5		
Leave " - - -	" -	10 23 "			
Arrive at Tonnerre - - -	Tuesday, at	0 36 a.m.	2 13	432	
Stop " - - -	" -	- -	0 9		
Leave " - - -	" -	0 45 "			
Arrive at Dijon - - -	" -	3 7 "	2 22	505.3	
Stop " - - -	" -	- -	0 10		
Leave " - - -	" -	3 17 "			
Arrive at Macon - - -	" -	5 50 "	2 33	583.6	
Stop " - - -	" -	- -	0 10	-	23
Leave " - - -	" -	6 0 "			
Arrive at Bourge - - -	" -	6 46 "	0 46	606.5	
Stop " - - -	" -	- -	0 3		
Leave " - - -	" -	6 49 "			
Arrive at Amberieu - - -	" -	7 30 "	0 41	626.7	
Stop " - - -	" -	- -	0 9		
Leave " - - -	" -	7 39 "			
Arrive at Culoz - - -	" -	8 52 "	1 13	658	
Stop " - - -	" -	- -	0 18		
Leave " - - -	" -	9 10 "			
Arrive at Charnbery - - -	" -	10 3 "	0 53	680	
Stop " - - -	" -	- -	0 6		
Leave " - - -	" -	10 9 "			
Arrive at St. Michel - - -	" -	0 10 p.m.	2 1	731	
Stop " - - -	" -	- -	0 30		
Leave by diligence over Mont Cenis.	" -	0 40 "			
Arrive at Susa - - -	" -	9 50 "	9 10	780	5.35
Stop " (none allowed for)	" -	- -	-		
Leave Susa - - -	" -	9 50 "			

NAMES OF STATIONS.	—	Times of Departures and Arrivals.	Details of the Division of Time <i>en route</i> , and Sum Total.	Distance of each Station in English Miles from London.	Average Rate travelled per Hour on each Railway Line.	
					H. m.	Miles.
Arrive at Turin - - -	Tuesday, at	H. m.	H. m.	Miles.		
Stop " - - -	" -	11 0 p.m.	1 10	813		
Leave " - - -	" -	- - -	0 30			
Arrive at Piacenza - - -	Wednesday, at	11 30 "				
Stop " - - -	" -	3 20 a.m.	3 50	930		
Leave " - - -	" -	- - -	0 5			
Arrive at Parma - - -	" -	3 25 "				
Stop " - - -	" -	4 30 "	1 5	966		
Leave " - - -	" -	- - -	0 4			
Arrive at Reggio - - -	" -	4 34 "				
Stop " - - -	" -	5 7 "	0 33	983.3		
Leave " - - -	" -	- - -	0 2			
Arrive at Modena - - -	" -	5 9 "				
Stop " - - -	" -	5 39 "	0 30	998.5		
Leave " - - -	" -	- - -	0 2			
Arrive at Bologna - - -	" -	5 41 "				
Stop " - - -	" -	6 30 "	0 49	1,021.5		
Leave " - - -	" -	- - -	0 35			
Arrive at Rimini - - -	" -	7 5 "				
Stop " - - -	" -	9 37 "	2 32	1,090	21.53	
Leave " - - -	" -	- - -	0 9			
Arrive at Ancona - - -	" -	9 46 "				
Stop " - - -	" -	Noon.	2 14	1,147		
Leave " - - -	" -	- - -	0 50			
Arrive at Pescara - - -	" -	0 50 p.m.				
Stop " - - -	" -	4 50 "	4 0	1,237.7		
Leave " - - -	" -	- - -	0 15			
Arrive at St. Severo - - -	" -	5 5 "				
Stop " - - -	" -	10 14 "	5 9	1,332		
Leave " - - -	" -	- - -	0 3			
Arrive at Foggia - - -	" -	10 17 "				
Stop " - - -	" -	11 5 "	0 48	1,349.5		
Leave " - - -	" -	- - -	0 10			
Arrive at Bari - - -	Thursday, at	11 15 "				
Stop " - - -	" -	3 5 a.m.	3 50	1,425		
Leave " - - -	" -	- - -	0 15			
Arrive at Brindisi - - -	" -	3 20 "				
	" -	7 3 "	3 43	1,494		
			71 33			

Note.—The contract Italian mail steamers of the Societa Peirano Danovars e Compania, carry out in fine weather a speed of 11 knots per hour and over, on the west and east coasts of Italy, and contemplate running on the Brindisi and Alexandria line.

When the coast railway from Reggio (in the Straits of Messina) to Brindisi is completed, the Messageries Impériales, *en route* to Marseilles, intend landing their homeward Indian mails at the former port.

The steamers of the Societa Anonima Italiana, Adriatico Orientale, otherwise Messrs. Palmer and Co., at present running between Ancona, Brindisi, and Alexandria, are about 600 tons burden, and 180 horse power; too small for mail communications of the present day.

REMARKS.

The average mean rate at present maintained, according to this statement, for the daily mail between London and Brindisi, is 20.90 miles per hour, including the stoppages noted.

If the French Government is not unwilling, there exist no practical difficulty against a future increase of the present low rate of speed between Paris and St. Michel, say from 23 to 27 miles per hour, including stoppages, notwithstanding that the 73 miles from Culoz to St. Michel is only a single line as yet.

The communication from St. Michel to Susa is over Mont Cenis, by diligence; this is the weak point of the Brindisi route, and however particular the passing inquirer may be, there are so many people

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people on the spot, whose interests, fancied or real, tempt them to gloss over the difficulties and probable delays of the winter months, that it becomes impossible to glean thus hastily the facts of the case; if, therefore, reliable information is required by the Government concerning the punctuality or otherwise of the present means of communication over Mont Cenis, the only sure way of arriving at such knowledge, will be to send a competent employé to Lanslebourg, situated at the base of the mountain on the French side, and another to Susa on the Italian side, to note the arrivals and departures of the diligence each day during the ensuing four or five months of winter.

In the month of July (fine weather), I travelled from Susa to St. Michel by the ordinary diligence in eight hours; we left Susa fully loaded with passengers, baggage, &c.; to ascend the mountain, from 14 to eight horses and mules were employed, the descent was performed with four, and occasionally two only.

One mile and a quarter of Mr. Fell's mountain system of railway is laid down a little above Lanslebourg; foreign engineers and others report very favourably of it. (See also Captain Tyler, R.E. report to the Board of Trade, published in the "Times" of 29th June.) The projectors of this scheme hold to the option that their system of railway will ensure punctuality, and at least double the present speed over the mountain throughout the year.

Competent engineers believe that the work of tunnelling Mont Cenis will yet occupy eight or nine years.

The 714 miles of railway from Susa to Brindisi, is commented upon in detail in my report, dated 25th July 1865, the gradients being very small, the present average of 21.53 miles per hour may be easily increased to 25 or something more, and I fully believe this increase will take place in the spring of next year.

The work of deepening the Port of Brindisi is simply dredging out the mud; this has been in operation since last March.

No dry dock was in existence the middle of last June; I consider this adjunct indispensable for the efficiency of mail ships; the expenses of a mail service between Brindisi and Alexandria would be much increased if established without the convenience of a dry dock at Brindisi.

The distance from Brindisi to Alexandria is 824 nautical miles, that is 82 hours 24 minutes, at 10 knots per hour.

The average rate of the mail trains conveying Her Majesty's Mails from Paris to Marseilles, is 27.40 miles per hour, including stoppages.

The mail steamer from Marseilles leaves that port between 9.30 and 10 a.m., of the second day from London (of the mails), and has to perform 1,450 nautical miles on her voyage to Alexandria, including at least four hours detention at Malta for mail communications and coaling purposes; her time on the voyage at the above rate of speed, is

	Hrs. min.
From Marseilles to Malta, 680 nautical miles - - - -	63 0
Detention at Malta - - - - -	4 0
From Malta to Alexandria, 820 nautical miles at 10 knots - -	82 0
Add, from London to the departure of mail ship from Marseilles -	37 30
TOTAL -	186 30

The present low rate of communication between London and Brindisi, viz., 20.90 miles per hour, delivers the daily mail in 71 hours 33 minutes.

	Hrs. min.
The time for Brindisi route is—London to Brindisi - - - -	71 33
Transporting mails from railway to mail steamer - - - -	1 30
From Brindisi to Alexandria, 824 miles nautical, at 10 knots - -	82 24
TOTAL -	155 24
Marseilles route - - - -	186 30
In favour of Brindisi route -	31 6

If the average railway speed between London and Brindisi were increased from 20.90 to 24 miles per hour, the time occupied would then be

	Hrs. min.	Days hrs. min.
To Brindisi - - - - -	62 15	
Transporting mails from railway to mail steamer - - - -	1 30	
From Brindisi to Alexandria, 824 miles, at 11½ knots per hour -	72 0	
TOTAL -	132 45	5 15 45

The Indian overland mails leave London Bridge at 8.30 p.m., and would by the last calculation arrive at Alexandria about noon of the sixth day, in ample time to be forwarded by mail train to Suez, which always leaves Alexandria at 4 p.m. daily.

As Alexandria harbour cannot be entered between sunset and sunrise, the higher rate of $11\frac{1}{2}$ knots per hour is necessary to obviate the risk of detention off the port a whole night.

The mistral, or north-west wind of the Marseilles route is much against the homeward mail; no disadvantage of this nature exists homeward to Brindisi; the strength of the bore of the Adriatic does not reach so far south as this port.

The English miles of land carriage are, by	Marseilles route	-	-	853 miles.
"	Brindisi	"	-	1,494 "
The nautical miles of sea carriage are, by	Marseilles	"	-	1,450 "
"	Brindisi	"	-	824 "

(signed) *W. H. Roberts*, Commander.

Peninsular and Oriental S. N. Company's Offices,
London, 22 September 1865.

No. 55.

(188 R.)

Mr. *F. Hill* to Mr. *Farrer*.

Sir,

General Post Office, 14 February 1866.

WITH reference to the personal communication which Lord Stanley of Alderley has recently had with Mr. Milner Gibson on the subject of appointing an officer of engineers to proceed to Italy, for the purpose of inquiring into the arrangements which could be made for the conveyance through that country of the British Mails to India, China, and Australia, I am directed by his Lordship to transmit to you a memorandum of instructions which he has caused to be drawn up, so far as regards the Post Office, for the guidance of Captain Tyler, R.E., the officer who is understood to have been selected for this special service

T. H. Farrer, Esq., &c. &c. &c.
Board of Trade.

I am, &c.
(signed) *F. Hill*.

Enclosure in No. 55.

INSTRUCTIONS to the Engineer Officer about to proceed to Italy with regard to the contemplated Conveyance through that Country of British Mails to India, China, and Australia.

YOU are requested to direct your chief efforts to the solution of the following questions :

- (1.) What saving in time would be made by adopting the Italian route?
- (2.) Could the time be kept punctually; or would there be a liability to irregularity, owing to a large portion of the Italian railway being single, or to any other cause?

In relation to these questions it will be necessary for you to ascertain what may safely be considered the longest time, except on rare occasions, that would be occupied in conveying the mails from the French frontier to the port of despatch. With respect to the time in which the altered French service would be performed, the Post Office will itself obtain the information.

(3.) At the completion of your second examination of the temporary railway over Mont Cenis you are requested to state what progress has been made in its construction, and whether you are still of opinion that the work will be successful, and will afford a good and safe means, at all seasons of the year, of crossing the mountain.

(4.) Can it be foretold with certainty when this temporary railway will be completed, and brought into use? If so, state the time and the grounds of your belief.

(5.) What time do you estimate the transit will take, including any loading or unloading that may be necessary?

(6.) What progress has been made in the tunnel through Mont Cenis, and when do you think this work will be completed?

(7.) What would be the probable additional cost of sending the Indian and China, and Australian Mails through Italy?

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The French and Italian territorial charges can readily be learnt by the Post Office; but with reference to the cost by sea, it is important for you to ascertain, beyond doubt, whether Brindisi and Reggio would, in their present state, or by any alteration which the Italian Government is willing to make (and that, without fail, by the time which may be proposed for the commencement of the Italian service), be suitable ports for the dispatch and arrival of the mail packets.

To secure a competition on the best terms for the department, it is important that we should be able to give the contractors the choice of either of those two ports; since, if Brindisi were excluded, the Italian and Austrian packets now plying between that port and Alexandria might be shut out; and, on the other hand, if Reggio could not be used, the Peninsular and Oriental Company's ships, if they should continue, as is probable, to run from Marseilles, could not enter into the competition; and that Company, to do the service at all, would be compelled to put on express and additional packets.

The present French packets from Marseilles to Alexandria would also be excluded.

To admit of competition in the matter, it will be necessary to terminate the present contract with the Peninsular and Oriental Company; and this can only be done on a notice of 12 months—a step which cannot, of course, be taken until the course of events can be clearly foreseen.

In order to reply satisfactorily to the foregoing queries, it will, of course, be necessary for you carefully to examine, not only the harbours of Brindisi and Reggio, but the whole of the railway to be traversed. Under the direction of the Peninsular and Oriental Steam Navigation Company, much of this duty has already been performed, and apparently with great care, by Mr. Roberts, one of the Company's commanders, a copy of whose report is herewith forwarded, together with a copy of a report from the Admiralty, on the suitability, for the purpose in view, of the ports of Brindisi and Reggio.

No. 56.

Mr. Fane to Mr. F. Hill.

(386 R.)

Board of Trade (Railway Department),
Whitehall, 2 March 1866.

Sir,

I AM directed by the Lords of the Committee of Privy Council for Trade to acknowledge the receipt of your letter of the 14th ult., with enclosures, on the subject of appointing an officer of engineers to proceed to Italy for the purpose of inquiring into the arrangements which could be made for the conveyance through that country of the British Mails to India, China, and Australia.

My Lords direct me to state, for the information of Lord Stanley of Alderley, that they have appointed Captain Tyler, R.E., to make the proposed inquiry, and that that officer will leave England for the purpose on the 10th April next.

My Lords have instructed Captain Tyler to place himself in communication with your Department with respect to the proposed inquiry.

F. Hill, Esq., Secretary,
General Post Office.

I am, &c.,
(signed) W. D. Fane.

Appendix, No. 2.

PAPERS handed in by Mr. Thornton, 23 March 1866.

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— No. 1. —

CORRESPONDENCE as to Negotiations for Transfer of RAILWAY TELEGRAPHS in India to a Private Company, 1863.

Negotiations as to Transfer of Railway Telegraphs to Private Companies.

Dear Sir,

1, Victoria-street, Westminster, S.W.,

13 April 1863.

WE beg to forward you a copy of the proposed general terms of agreement between the Great Indian Peninsular Railway Company and the Oriental Telegraph Company, with the modifications introduced to meet the views of your directors. We shall be glad if you will lay this before the Board, and obtain their sanction to it at their earliest possible convenience.

T. R. Watt, Esq.

Great Indian Peninsular Railway Company.

We have, &c.

(signed) Bright and Clark.

Proposed general Terms of Arrangement between the Oriental Telegraph Company and the Great Indian Peninsular Railway Company.

1. A company to be formed for the purpose of establishing a system of telegraph throughout India.

2. The Board to be composed in the first instance of a director from each of the following railway companies, and two directors from the Electric and International Telegraph Companies.

3. The telegraph company to be allowed to form a telegraph for commercial purposes along the lines of the Great Indian Peninsular Railway Company, and in consideration thereof the telegraph company to pay to the railway company at the rate of 40s. per annum for every mile of the railway upon which they shall erect their wires, and in addition 5l. per cent. of their (the telegraph company's) gross receipts beyond 20,000 l. per annum earned within the railway company's system.

4. The telegraph company to have the exclusive right of working commercial messages

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over the Great Indian Peninsular Railway Company's system, but at any station where the telegraph company may not have an office open for the receipt of messages from the public the railway company may send commercial messages by their own telegraph for their own profit.

5. The telegraph company to use railway company's telegraph posts, and to have the right of erecting thereon not exceeding six wires; the work to be executed to the satisfaction of the railway company's engineer, in accordance with a general design of which he shall have previously approved, and the telegraph company to pay for any damage occasioned to the railway company's property through the default or neglect of the telegraph company's servants.

6. The railway company to decide the form of the post, but which shall be capable of carrying eight wires. The telegraph company to pay for the use and depreciation of the posts, upon the following principle:

The actual cost of the posts on the ground to be ascertained from the railway company's books, and the telegraph company to pay to the railway company a proportion of that cost, calculated at the rate of 10 per cent. per annum for iron posts, and 25 per cent. per annum for wooden posts, in the ratio of the number of wires erected on the posts owned by the telegraph company and the railway company respectively.

7. The railway company to find a small room when the operator is a native, if required to do so by the telegraph company, and the telegraph company to pay 10 per cent. per annum on the cost, and to keep it in repair.

8. At stations where the average number of messages is less than , the railway company's porters to carry them out at the current traffic rates for portage. When the number of messages exceeds that amount the telegraph company to find messengers.

9. The telegraph company to find all the materials for their own telegraph, except posts, and to erect and maintain their own wires.

10. The railway company to have the right to call upon the telegraph company to maintain the railway company's wires on condition that two wires are always held free for the use of the railway company, the expense of maintenance being in such case divided between the telegraph company and the railway company in proportion to the number of wires owned by each.

11. The persons employed in the telegraph service to be conveyed free over the railway.

12. The railway company's messages transmitted beyond its own system on the telegraph company's wires, to be conveyed at a reduction of 75 per cent. upon the tariff charge.

13. The telegraph company to take over the railway company's wires, instruments, &c., at a valuation, if required to do so; and in that case all the railway company's messages to be conveyed at a reduction of 75 per cent. upon the tariff charge.

14. The telegraph company to give two months' notice, in writing, of their intention to abandon any station, or pay a penalty of 50L., and the railway company to have the option of taking over the instruments there at a valuation.

15. The agreement to be for 21 years, terminable by either party at the end of seven or 14 years, giving six months' previous notice in writing. If this notice proceeds from the telegraph company the railway company to have the option of taking over the property of the telegraph company at a valuation. If not taken over, the telegraph company to have the right to remove their property. If the notice proceeds from the railway company the damage sustained by the telegraph company to be assessed by an arbitrator.

16. Railway company to have the right to inspect the telegraph company's accounts, and general arbitration clause.

(No. 66, of 1863.)

Herman Merivale, Esq., C.B., Under-Secretary of State for India.

Great Indian Peninsular Railway Company Offices,
No. 3, New Broad-street, E. C., London,

20 April 1863.

Sir,

I AM desired by the Board to forward, for submission to the Right Honourable the Secretary of State for India in Council, the enclosed proposed general terms of agreement for the establishment of a Commercial Telegraph Company for India on the railway lines, and to request that he will sanction this Company's entering into an agreement with the proposed Oriental Telegraph Company upon the basis of these terms, agreeably to the Board's resolution, recorded in their minutes of the 17th instant.

I am, &c.

(signed) *Thomas R. Watt.*

Sir,

India Office, 18 August 1863.

App. No. 2.

WITH reference to your letter of the 18th April, No. 66, I am directed by the Secretary of State for India to acquaint you that he considers it desirable that he should be made acquainted with the views of the Government of India on the proposed arrangements with the Oriental Telegraph Company before coming to a decision on the subject. A copy of your letter has accordingly been sent to that authority, with a request that it may be taken into early consideration.

T. R. Watt, Esq.

I am, &c.
(signed) J. Cosmo Melvill.

(No. 1939.)

East Indian Railway House,
Alderman's Walk, New Broad-street, E. C., London,
20 July 1863.

Sir,

WITH a view to utilise, as far as possible, the expenditure which has already taken place, and which must still take place, in providing posts for this company's telegraph system, the Board have for some time past been in communication with the representatives of an association about to be formed, under the title of the Oriental Telegraph Company, for the purpose of carrying out a system of commercial telegraphs in India, and which desires to make use of this Company's posts, as well as those of some of the other railway companies, for the erection of its wires, and the conduct of its business.

I am now directed to hand you enclosed draft terms upon which it is proposed to base an agreement between this Company and the Oriental Telegraph Company, subject to the sanction of the Secretary of State, and the Board will be glad to have an early intimation of his views upon the subject.

I have, &c.
(signed) D. J. Noad, Secretary.

The Under-Secretary of State, India Office.

PROPOSED General Terms of Arrangement between the Oriental Telegraph Company
and the Railway Companies.

A COMPANY to be formed for the purpose of establishing a system of telegraphs throughout India. The Board to be composed of a director from each of the following Indian railway companies, and two directors from the Electric and International Telegraph Company, viz.:

The telegraph company to be allowed the use of the railway company's posts, for the purpose of forming a telegraph communication on the following terms:

Where the line forms part of the direct route between Calcutta and Bombay and Kurrachee, the telegraph company to pay the railway company at the rate of 40s. per annum, in respect of every mile of railway upon which the telegraph company shall elect their wires, and, in addition, 5 per cent. per annum of the telegraph company's gross receipts above 28,000 l. per annum earned within the railway company's system. On all other parts of the line, the telegraph company to pay the railway company 5 per cent. upon its gross annual receipts. The telegraph company to have the exclusive right of working commercial messages over the line, except where they have no offices for the receipt of messages. At such places, the railway company to have the right of sending commercial messages for their own profit.

The telegraph company to pay the railway company for interest and depreciation, calculated at the rate of 10 per cent. per mile per annum on the actual cost of the posts of iron, or at the rate of 25 per cent, if wood, such cost to be ascertained from the railway company's books, in proportion to the number of wires owned by the telegraph company from time to time, provided always that, if it should hereafter appear that the rate of 25 per cent. on the wooden posts is excessive, it be left to an arbitrator to decide to what extent it should be reduced.

The railway company to erect posts capable of carrying eight wires but not more, the number of wires to be erected for each company to be mutually agreed; the railway company to decide the form of posts.

The railway company to find a small room when the operator is a native, if required to do so by the telegraph company, and the telegraph company to pay 10 per cent. per annum on the cost, and to keep it in repair.

At stations where the average number of messages is less than the railway company's porters to send them out at a charge of per message.

When the number of messages exceeds that amount, the telegraph company to find messengers.

The telegraph company to find its own wires, insulators, plates for hanging the same to the posts, batteries, tools, working materials of all and every kind, except posts, and its

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own operators and other servants except as before noted. The whole of the wires, &c. to be erected by the railway company or the telegraph company, as may hereafter be agreed upon, the cost being borne by the telegraph company.

The insulators to be of a pattern approved by the railway company, but with such a difference that the property of the two companies can be distinguished.

The telegraph company to find all wires and materials, except posts for renewals, and to maintain all the wires, the expense of maintenance being divided between the telegraph company and railway company, in proportion to the number of wires used by each; the men employed on the telegraph service to be conveyed free over the railway company's line.

The telegraph company to be bound to keep two wires always in perfect working order for the exclusive use of the railway company.

Damage by fire attributable to the telegraph company to be paid by them.

The railway company's messages required to be transmitted over the wires belonging to the telegraph company, to be conveyed at a reduction of 75 per cent. upon the tariff charge.

The telegraph company to take over the railway company's instruments at a valuation, if required to do so, and in that case all the railway company's messages to be conveyed at a reduction of 75 per cent. upon the tariff charge.

The telegraph company to give two months' notice in writing of their intention to abandon any station, or pay a penalty of 50 £.; and the railway company to have the option of taking over the instruments there at a valuation.

The agreement to be for 21 years, terminable by either party at the end of 7 or 14 years, giving 12 months' notice in writing. In the event of the notice proceeding from the railway company, the railway company to pay back the capital expended, together with a sum of money that shall make up to the telegraph company a dividend over the whole 7 or 14 years, as the case may be, equal to the average earnings of the three years preceding the notice. In the event of the notice proceeding from the telegraph company, the railway company to have the option of taking all the property at a valuation.

Railway company to have the right to inspect the telegraph company's accounts.

A general arbitration clause to be inserted in the agreement.

Sir,

India Office, 18 August 1863.

I AM directed by the Secretary of State for India, to acknowledge the receipt of your letter of the 20th ultimo, No. 1939, and to acquaint you in reply, that he considers it desirable that he should be made acquainted with the views of the Government of India on the proposed arrangements with the Oriental Telegraph Company, before coming to a decision on the subject. A copy of your letter has accordingly been sent to that authority, with a request that it may be taken into early consideration.

D. J. Noad, Esq.

I am, &c.
(signed) J. Cosmo Melvill.

COPY RAILWAY DESPATCH to India, No. 42, dated 8 August 1863.

Para. 1. I TRANSMIT herewith copies of letters and enclosures, from the directors of the * East Indian and the † Great Indian Peninsular Railway Companies respectively, requesting sanction to arrangements proposed to be entered into with a telegraph company in India, under which the railway companies would transfer their business, in connection with the conveyance of commercial messages, to the telegraph company, you will observe that the conditions, although varying in some minor points, are substantially the same in both cases.

2. Before coming to a decision on these proposals, I am desirous of being informed of the views of your Government thereon, and I have accordingly to request that your Excellency will take the matter into consideration, and furnish me with your opinion on the subject, at an early date.

(Railway No. 47 of 1864.)

To the Right Honourable Sir *Charles Wood*, Baronet, G.C.B., Secretary of State for India.

Public Works Department, Simla,
10 June 1864.

Sir,

HAVING now received reports from the Governments of Bombay, Bengal, and the North-Western Provinces, upon the proposed transfer of the public telegraph business from the East Indian and Great Indian Peninsular Railway Companies, to the Oriental Telegraph

* Letter from Mr. Noad, dated 20th July 1863, No. 1939 and enclosure.

† Letter from Mr. Watt, dated 20th April 1863, No. 66 and enclosure.

Telegraph Company, we are in a position to answer your despatch, dated 8th August 1863. But it is to be regretted that all these reports deal only in generalities, and that no facts are given on which to form a conclusive opinion as to the expediency or otherwise of these proposals. We have, however, thought it desirable to inform you at once of the general views we have adopted on the subject, at the same time calling the attention of the local governments to the points that seem to us to require further elucidation.

2. The consideration proposed to be given by the telegraph company to the railway company, is a mileage of 2*l.* for some parts of the line; five per cent. on their gross income in excess of certain fixed amounts; and a payment in proportion to the number of wires used by the telegraph company and the railway company respectively, at the rate of 10 per cent. on the actual cost of the posts.

3. In order to see the real scope of these terms, we will consider their probable result in the case of the East Indian Railway.

4. It seems to be intended that the railway company shall, at any rate for the present, do all its own business; therefore, the staff and working expenses connected with the messages will be nearly the same hereafter as now. But this is not clearly shown; for neither is the proportion of expense due to maintenance of the line, and to working the messages stated, nor the proportion of the railway business to the commercial business.

5. The railway company will still have to pay for the maintenance of the wires it requires for itself, and for the cost of sending its own messages, including the cost of the staff. It will also pay for the maintenance of the posts in proportion to the number of wires it requires.

6. The question therefore seems to be this:—What will be saved to the company, if anything, by not maintaining wires not essential for railway business; by not working commercial messages, by not paying for the entire maintenance of the posts; and will 2*l.* per mile on the through distance between Calcutta and Jubbulpoor, with 5 per cent. on the probable gross income of the telegraph company in excess of 28,000*l.*, and with the share of 10 per cent. on the cost of the posts (less the telegraph company's share of maintenance), in proportion to the number of wires, amount, with the savings above noted, to as much as the present or prospective proceeds from the commercial business of the railway company?

7. It is stated that the present annual profits from commercial messages on the East Indian Railway are about 5,760*l.* This sum we presume to be the gross income, in cash, for the whole of the staff and the telegraph lines being assumed to be necessary for railway purposes; all cash receipts are profits.

8. Considering that the gross income of the railway company from its telegraph business is now only 5,760*l.*, the value of 5 per cent. on the telegraph company's income in excess of 28,000*l.* will at all events for some time to come be quite inappreciable. For the railway company to earn 1,000*l.* from this source, the telegraph company's income must be 48,000*l.*, or not far from ten-fold the railway company's present income from this class of business.

9. The essential thing, therefore, is to see whether the stipulated share of the 10 per cent. on the cost of the posts, with the payment for mileage, or 2*l.* on 870 miles, the distance from Calcutta to Jubbulpoor, that is, 1,740*l.* will compensate for the loss of the commercial business.

10. If, as is said by the Superintendent of East Indian Railway Telegraphs, four wires are required for the railway business, while in all eight are to be used, the actual share of the 10 per cent. that will go to the railway company will be one-half or 5 per cent. As this must cover the renewals, as well as pay interest on capital sunk, the actual set-off to the company will be less than the amount of the guarantee, and Government may suffer unless the elements of saving are more considerable than seems at all likely.

11. It appears that the posts as now existing on the East Indian Railway are at best fitted to carry four wires, and that a large additional outlay will be necessary to fit them to carry eight wires. But no statement is made as to the aggregate cost of the posts on which the 10 per cent. would be chargeable, or what is the total sum at debit of capital on account of the railway telegraph as a whole, or of the posts in particular. If, for example, the present value of the posts, as it might be charged to the telegraph company were 100,000*l.*, and 75,000*l.* additional were necessary to fit them under the proposed agreement for the use of the telegraph company, the latter would pay, say 5 per cent. on 175,000*l.*, or 8,750*l.* Of this it might be said that 5 per cent. on the new capital 75,000*l.*, or 3,750*l.*, would only just cover the guarantee, but the remaining 5,000*l.* would be a distinct advantage to the railway and to Government. The railway company would then receive 1,740*l.* as mileage, and 5,000*l.* as interest on the old posts, in all 6,740*l.*, in lieu of 5,760*l.*, the receipts from the existing commercial business. On this hypothesis the railway company would benefit to the extent of 1,000*l.* per annum. In short, the equity of the

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per-centage named depends on the actual figures which are not known. If the present value of the posts is very small compared with the sum which will be necessary to fit them for carrying eight wires, the per-centage is almost certainly too low.

12. As regards the Great Indian Peninsular Railway, no facts are stated which give evidence on one side or the other.

13. The above remarks refer only to the financial aspect of the proposal. As to the administrative questions involved, we are disposed to concur with those persons who express a doubt as to the expediency of having a double telegraph agency on these railways.

14. We are of opinion that one of two arrangements should be made; either the railway company should contract with the telegraph company for the latter to do all the business, or it should do the whole itself, merely leasing a few through wires to the telegraph company, to be worked entirely by the latter.

15. In the former case, upon the telegraph company paying a fixed sum down, or a yearly rent of 10 or 12 per cent. on the capital sunk, the whole telegraph might be transferred to them, leaving the railway company a lien on it to ensure its being maintained and worked.

16. The telegraph company should engage to maintain on all parts of the line as many wires (up to four) as the railway company may require, with signallers at every signal station of the railway, and to carry the railway company's messages in preference to those of all other persons, and at a reduced price.

17. On the other hand, the railway company should have the power of repairing the line and employing signallers at the expense of the telegraph company if the latter failed in its engagements.

18. In the second case, the railway company should maintain both the wires and posts, and charge for them a sufficient rate on the actual outlay.

19. In any agreement it will be necessary to see that the full powers of the Government under the contract with the railway company are carefully guarded on the transfer of the telegraphs to a separate company.

We have, &c.
(signed) *John Lawrence.*
H. Rose.
R. Napier.
H. S. Maine.
C. E. Trevelyan.
W. Grey.
G. N. Taylor.

Sir,

India Office, 1st September 1864.

WITH reference to the correspondence that has passed relative to a proposed arrangement between the East Indian Great Indian Peninsular Railway Company and the Oriental Telegraph Company, I am directed by the Secretary of State for India to acquaint you that, in consequence of the receipt of the expected Report of the Government of India on the subject, he has again had the matter under consideration; and that he has come to the conclusion that it is not desirable that the railway company's public telegraph business be transferred to a separate company.

He is therefore unable to sanction the arrangement proposed in your letter of the 20th July 1863, No. 1939.

20th April 1863, No. 66.

D. J. Noad, Esq.
T. R. Watt, Esq.

I am, &c.
(signed) *H. Merivale.*

(No. 2231.)

Sir,

East Indian Railway House,
Alderman's-walk, New Broad-street, E.C.,
London, 11 January 1865.

REFERRING to the Secretary of State's Letter of the 1st September last, stating that, in consequence of the receipt of the expected Report of the Government of India on the subject of the correspondence which has passed relative to a proposed arrangement between this Company and the Oriental Telegraph Company, he has again had the matter under consideration, and that he has come to the conclusion that it is not desirable that the railway

railway company's public telegraph business should be transferred to a separate company, I am instructed by the Board of Directors to request the favour of being furnished with a copy of the Report in question, or with any reasons which may have influenced the Government of India in drawing up the Report.

To the Under-Secretary of
State for India.

I have, &c.
(signed) *D. J. Noad*,
Secretary.

App. No. 2.

Sir,

India Office, 26 January 1865.

I AM directed to acknowledge receipt of your letter of the 11th instant, and in reply to the request therein made, to state, that to furnish the Directors of the East Indian Railway Company with a copy of the Despatch received from the Government of India on the subject of certain proposals of the Oriental Telegraph Company, would be contrary to the usage of this office.

It was not merely on anything stated in that Despatch that Sir Charles Wood came to the conclusion that it would be undesirable to transfer the railway company's telegraphic business to a separate company.

D. J. Noad, Esq.

I am, &c.
(signed) *Dufferin*.

COPY of RAILWAY DESPATCH to Government of *India*, dated 6 September 1864;
No. 51.

Para. 1. I HAVE received and considered in Council your Excellency's Despatch of the 10th June last, No. 47, relative to the proposed transfer to a separate company of the public telegraph business of the East Indian and Great Indian Peninsular Railway Companies.

2. After attentively considering the matter in Council, I have come to the conclusion that it is not desirable that the proposed transfer should be made, and have the railway companies accordingly.

— No. 2. —

CONVENTIONS with FOREIGN POWERS for the establishment of TELEGRAPHIC COMMUNICATIONS.

CONVENTION between Her Majesty and the Sultan for the establishment of a Telegraphic Cable between *Malta* and *Alexandria*.

HER Majesty the Queen of the United Kingdom of Great Britain and Ireland, being desirous, with a view to accelerate communication with India, to establish a submarine telegraphic cable from Malta to Alexandria, His Imperial Majesty the Sultan, in order to afford a fresh proof of his friendship for Her Britannic Majesty, has consented to afford Her the necessary facilities for that purpose, so far as regards the Ottoman territory. Their Majesties have accordingly resolved to record the needful arrangements in a convention, and have named as their Plenipotentiaries, that is to say,—

Her Majesty the Queen of the United Kingdom of Great Britain and Ireland, the Right Honourable Sir Henry Lytton Bulwer, a Member of Her Britannic Majesty's Most Honourable Privy Council, Knight Grand Cross of the Most Honourable Order of the Bath, and Her Majesty's Ambassador Extraordinary and Plenipotentiary to the Sublime Porte;

And His Majesty the Emperor of the Ottomans, His Highness Mehemed Emin Aali Pasha, President of the Council of the Tanzimat, and Acting Minister for Foreign Affairs, decorated with the Orders of the Medjidie and Merit of the First Class, Grand Cross of the Imperial Order of the Legion of Honour of St. Stephen of Austria, of the Red Eagle of Prussia, of St. Anne of Russia, of St. Maurice and Lazarus of Sardinia, of the Polar Star of Sweden, and several other foreign orders;

Who, after having communicated to each other their respective full powers, found in good and due form, have agreed upon the following articles:—

Article 1. It being the intention of Her Britannic Majesty to establish a telegraphic cable from Malta to Alexandria, His Imperial Majesty the Sultan consents that such cable may be landed near Alexandria, and may there be placed in connection with the other telegraphic lines terminating at that city.

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His Imperial Majesty also consents that the said telegraphic cable may be landed at such points of the coast of Africa, within the Regency of Tripoli, as may be found necessary.

Article 2. The British Government may establish stations at Alexandria, and at all other points where the said cable may be landed, and may maintain such stations and work the said cable.

Article 3. The British Government shall have power to appoint, to pay, and to discharge, at its pleasure, all the officers or persons necessary for the establishment, maintenance, and working of the aforesaid cable at Alexandria, and all other places where the cable may be landed within the Ottoman territory, as well as of the stations at those places.

Article 4. The aforesaid telegraphic cable and stations, at the points where the cable touches the land shall be watched over and protected by the Ottoman Government wherever it may have an authorised agent, without, however, any responsibility therefrom attaching to the Sublime Porte.

Article 5. The persons employed at the stations which may be established within the Ottoman territory by means of the present convention, shall be under the protection of Great Britain, and any proceeding, civil or criminal, instituted against them, shall be governed by the rules established for British subjects in like cases.

Article 6. Any message addressed to a person residing within the Ottoman territory, not being an officer of the line, shall, unless intended merely for transmission through and beyond the Ottoman territory, be delivered to such person only through an agent of the local government.

Article 7. Her Britannic Majesty engages that all despatches of the Ottoman Government shall have like priority with those of the British Government over all other despatches forwarded over this line.

The official despatches of the Ottoman Government may be sent in cypher.

Article 8. In the event of Her Britannic Majesty making over to a company the establishment or the working of the aforesaid telegraphic cable, His Imperial Majesty the Sultan engages to grant a firman for 85 years to such company, on the same conditions as are prescribed by the present convention.

In such case the company, in all that concerns the stations within the Ottoman territory, shall, in their corporate capacity, be subject to the general laws of the Ottoman Empire; but the persons in the employ of the company shall, individually, be under the protection of the nation to which they may appertain.

Article 9. The present convention shall be ratified, and the ratifications shall be exchanged at Constantinople, in two calendar months, or sooner if possible, and shall be carried into execution from the date of the exchange of the ratifications.

Done at Constantinople on the 21st day of April 1861.

(signed) *Henry L. Bulwer.* (L. s.)
Aali. (L. s.)

INDO-OTTOMAN TELEGRAPHIC CONVENTION.

HER Majesty the Queen of the United Kingdom of Great Britain and Ireland, and His Majesty the Emperor of the Ottomans, being desirous to establish between their respective States telegraphic communications, by means of which India, connected by a submarine cable with the Ottoman territory at the mouth of the Shat-el-Arab, will be in telegraphic communication with Turkey, and consequently with all the other States of Europe, have agreed to conclude a telegraphic convention, and with that object have named as their Plenipotentiaries, that is to say,—

Her Majesty the Queen of the United Kingdom of Great Britain and Ireland, the Right Honourable Sir Henry Lytton Bulwer, a Member of Her Majesty's most Honourable Privy Council, Knight Grand Cross of the most Honourable Order of the Bath, and Her Majesty's Ambassador Extraordinary and Plenipotentiary to the Sublime Porte; and His Majesty the Emperor of the Ottomans, His Highness Mehemid Emir Aali Pasha, Minister for Foreign Affairs, decorated with the Imperial Orders of the Osmaïne, of the Medjidie, and of Merit of the First Class in Brilliants, Grand Cross of several foreign orders; who, after having communicated to each other their full powers, found in good and due form, have agreed upon the following Articles:

Article I. The Ottoman Government will continue at its own cost, to the mouth of the Shat-el-Arab, the main telegraphic line of Asia now existing between Scutari of Constantinople and Bagdad, and will connect the said main line, in the direction of Khanakain, with the Persian land lines which communicate with the submarine cable at Bushire. The maintenance and repairs of the said Ottoman lines will be at the charge of the Ottoman Administration.

Article II. On the other hand, the Government of India will lay down, at its own expense, a submarine telegraphic cable, which, starting from some point of the British Indian Empire,

Empire, and touching at Bushire, will terminate at the mouth of the Shat-el-Arab, where it will join the Ottoman land line.

The maintenance and repairs of this cable shall be at the expense of the Indian Administration.

Article III. His Majesty the Sultan authorises the establishment, on Ottoman territory at the mouth of the Shat-el-Arab, of a British telegraph office, with a staff which shall not exceed in number 50 persons, placed under the exclusive orders of a British station master, and which, as well as the apparatus and all the instruments requisite for working the submarine line, shall be at the expense of the British Government.

Article IV. The aforesaid British office shall be located in the same building occupied by the Ottoman station at the mouth of the Shat-el-Arab, with a view to facilitate the combined operations of the common service.

The apparatus of the Ottoman service and that of the British service at that joint station shall be placed in separate compartments, but in close proximity to each other, and shall not be connected.

The exchange of messages shall take place immediately on their receipt, the officers handing them to each other through a window, and the service of the British and Ottoman officers shall be permanent. The rent and cost of maintenance of the mixed telegraphic station shall be shared in equal proportions by the British and Ottoman Administrations.

Article V. It is well understood that the active service of the British office on Ottoman territory shall be limited to the receipt and delivery by hand to the Ottoman office of the messages arriving from India by the submarine cable; to the transmission of those which are delivered to it by the Ottoman office; and, lastly, to the superintendence and maintenance of the safe and regular submarine communication between the mouth of the Shat-el-Arab and India.

The direction in chief of the mixed station shall devolve on the Ottoman Administration, but without the right of interfering in the internal administration of the British office.

Article VI. In order to ensure promptitude in the Indo-European correspondence, and its regular transmission and receipt, the Ottoman Government will not fail to establish a permanent service at Bagdad and Fao, as well as at the majority of stations on the main line of Asia between Constantinople and Fao, and to appoint thereto a staff possessing a knowledge of the English language sufficient for the perfect performance of that important service.

Moreover, the Ottoman Government, being desirous that the expeditious transit of the Indo-European messages over its territory should be rendered still more satisfactory, engages to establish at Constantinople an office of transmission, devoted exclusively to the service of messages to and from India. Its officers, and especially the station master, shall be selected from those of the Ottoman telegraph officials who are thoroughly conversant with the English language.

Article VII. The Ottoman Government will take the necessary measures to ensure that one wire of the main line, from Constantinople to Fao, shall be always exclusively devoted to Indo-European messages.

In case this wire should get out of order, or in case of a press of traffic, the official Indo-European messages may be forwarded by one of the wires intended for local traffic, but after the official despatches of the Ottoman Government. In that case private Indo-European despatches shall be forwarded together with private messages already deposited at the office, and in alternative order with those messages, whatever may have been the hour at which the latter may have been deposited.

Article VIII. The Convention of Brussels of 30th June 1858, in all that relates to the details of the telegraphic service, shall be mutually observed by the two contracting Governments, in so far as it is not opposed to the terms of the present Convention.

Article IX. It is agreed between the high contracting parties, that the rates for Indo-European messages sent by the Ottoman lines, Asia, throughout their whole extent from Constantinople to Fao, or to the Persian frontier in the direction of Khanakain and *vice versa*, shall not exceed the limit of twenty-seven francs and a half ($27\frac{1}{2}$ francs) for a single message sent from Constantinople to Fao or *vice versa*, and of twenty-two francs and a half ($22\frac{1}{2}$ francs) for a single message sent from Constantinople to Khanakain or *vice versa*; as also that the rates for messages traversing the whole submarine line from India to Fao, or to Bushire and *vice versa*, shall not exceed the limit for the former of 62 francs and a half ($62\frac{1}{2}$ francs) for each single despatch, and for the latter of fifty francs (50 francs).

Article X. The Administrations of the two contracting Governments will communicate to each other, with the least possible delay, the tariff of their stations and frontiers, in so far as they may have reference to the Indo-Ottoman frontier of Fao. According to that tariff the rates shall be mutually accounted for in the monthly accounts of messages exchanged between the two Administrations at the aforesaid frontier of Fao.

Article XI. The mutual account for telegraphic rates, expenses of postage, and of expresses, &c., shall be checked at the expiration of every month, and settled quarterly. The liquidation and payment of the surplus which may be due to either Administration, shall take place at the close of each quarter. The accounts of each Administration shall enumerate only the rates in debit. They shall be drawn up by the Ottoman Administration.

App. No 2.

tion in francs and centimes, the total being reduced to shillings and pence; and by the British Administration in shillings and pence, the total being reduced to francs and centimes. The reduction of these sums shall be calculated at the rate of,—

One pound sterling = 25 francs.
 One shilling - - = 1 franc 25 centimes.
 One penny - - = 10 centimes.

Article XII. The balance which may accrue from the quarterly liquidation in favour of one or other of the administrations, may be paid either in Turkish pounds, in pounds sterling, or in 20 franc pieces. Should the balance be in favour of the Indian Administration, payment shall be made by Turkey into the hands of the delegate of that Administration at Constantinople; and should it be in favour of the Ottoman Administration, payment shall be made by the aforesaid delegate to the Director General of the Ottoman Telegraphs.

Article XIII. In order to facilitate and accumulate the operations relating to the reciprocal settlement of the quarterly accounts with the Central Administration of Ottoman Telegraphs, the Indian Government shall be entitled to appoint a delegate to reside at Constantinople, the seat of that administration. The Ottoman Government shall likewise be entitled to name a delegate for the same purpose, to reside at the seat of the Central Telegraph Administration of the Indian Government.

The respective delegates shall be entitled to receive from the respective Central Administrations all the information and explanations which they may require.

Article XIV. All messages to or from India may be forwarded indifferently, as may be most convenient for the service, either by the line of Bussorah or by that of Khanakain.

Article XV. It is well understood that the Ottoman Government shall be in account current and shall have direct administrative relations with the Government of India in respect to all messages, whether sent by the frontier of Fao, or by the Persian route of Khanakain. Thus the two contracting Governments shall not be in account current, and shall not have direct administrative relations with Persia, except in respect to payment for those messages only which shall have traversed the Persian lines; so that as regards India-European messages, the two high contracting parties shall only account to the Persian Government for the amount due to it for their transit along the Persian lines between Khanakain and Bushire.

Article XVI. The present Convention shall come into operation as soon as the submarine cable shall be in communication with the land lines of Turkey and of India, and shall remain in force for three years from the day on which the ratifications are exchanged. Nevertheless, the high contracting parties may introduce into it, according as necessity may require, such modifications as may be considered by common agreement to be useful and indispensable.

At the end of three years the present Convention shall be deemed to be in force for an indefinite term, and until the expiration of six months, reckoning from the date on which either of the parties shall have made known to each other its intention to put an end to the same.

Article XVII. The present Convention shall be ratified, and the ratifications shall be exchanged at Constantinople as soon as possible.

Done at Constantinople on the third day of September, One thousand eight hundred and sixty-four.

(signed) *H. L. Bulwer.*
Aali.

TELEGRAPHIC CONVENTION WITH PERSIA.

As Her Majesty the Queen of the United Kingdom of Great Britain and Ireland, and His Majesty the King of all the Kingdoms of Persia, are desirous of regulating the telegraphic communication between Europe and India, and of placing this work on a sure and friendly basis, they have resolved that a Convention for that purpose shall be concluded; wherefore their Majesties have named as their Plenipotentiaries:—

Her Majesty the Queen of the United Kingdom of Great Britain and Ireland;

His Excellency Charles Alison, Esq., Companion of the Most Honourable Order of the Bath, Her Envoy Extraordinary and Minister Plenipotentiary at the Court of Persia;

And His Majesty the King of all the Kingdoms of Persia;

His Excellency Mirza Saeed Khan, his Minister for Foreign Affairs, possessor of the Order of the Royal Portrait adorned with diamonds, and of the blue cordon, and bearer of the pearly tassels and the rod adorned with diamonds; possessor of the Order of the First Serteeb with its special cordons, and bearer of the Order of Saint Ann, adorned with diamonds of the first class, and of the Order of the Medjidie of the First Class, and of the First Order of the Iron Crown, and the First Order of Leopold, and the First Order of Danaborg, and of the First Order of Saint Maurice and Lazare, and the First Order of the Saviour of Greece, and the Order of the Polar Star of Sweden, and the Second Order of the Legion of Honour.

And the aforesaid distinguished representatives, after meeting in the capital of Teheran, and

and perusing and exchanging their letters of full power, and finding them to be in due order, have concluded the following articles:—

Article I. In order to improve the telegraphic communication between Europe and India, the Persian Government agrees to attach another wire to the poles now standing, from Bushire to Khanikin, and to bring it into working order as soon as possible. The wire to be used solely for international messages sent in European languages.

Article II. In order that the second wire may be attached in a complete and effective manner, the Persian Government also agrees that it shall be done under the direction and supervision of an English engineer officer and staff; and the Persian Government will use its best endeavours to collect the necessary materials, and lay down the wire with all expedition.

Article III. The British Government agrees to procure for the Persian Government, at a reasonable price, and with the cognizance of a Persian Commissioner, all the wire, insulators, Morse instruments, &c., that may be requisite for this work, inclusive of two hundred iron posts for the marshy tract of Bushire, and to deliver them over to the Government Commissioners at any seaports or frontier towns of Persia that may be suitable, receiving payment in five years, in five instalments.

Article IV. The Persian Government, moreover, agrees that an English telegraph officer, with the necessary staff, not exceeding fifty (50) in number, exclusive of families, shall be engaged, from the opening of telegraphic communication through the new wire, for five (5) years, in organising the Persian line of telegraph and giving instruction in telegraphy. And the British Government agrees that the English officer and his staff shall, at the expiration of the prescribed period, make over the said line to the Persian Government, and cease connection with the Persian telegraph.

Article V. The conditions under which the English officer shall exercise control over the second wire, during the prescribed period, are stated in the following rules:—

1. His Royal Highness the Itizad-es-Sultaneh, Minister of Science, or any other person, who, by the Shah's order, shall be appointed in his place, is to be considered the head and absolute chief of all the Persian Government telegraphs.

2. Any order which his Royal Highness, or such other person in his place, may issue concerning the protection of the line, its working, and the Persians employed on it, shall be given through, and with the approval of, the English telegraph officer.

3. For the protection of the line, the whole distance from the Turkish frontier to Bushire shall be divided, from station to station, into six sections, as follows:—

From the Turkish frontier to Hamadan.

From Hamadan to Teheran.

From Teheran to Cashan.

From Cashan to Ispahan.

From Ispahan to Shiraz.

From Shiraz to Bushire.

To each of these divisions the Itizad-es-Sultaneh shall appoint a Persian officer, who will be responsible to his Royal Highness for the protection of the line situated within his limits. To enable the said Persian officer, or Yaver of each division, to carry out his duties efficiently, a certain number of horsemen shall be stationed under his orders along the line. The Yaver will, of course, accept any suggestions which the English telegraph officer may give with reference to his charge, due regard being had to the customs of Persia, and her power of carrying out such suggestions.

4. The organization of offices, and instruction of employés, shall be exclusively in the charge of the English superintending officers, who will be responsible for the working of the line in these respects; and the Persian signallers shall be ordered to obey implicitly the instructions which the English officers may give in the performance of their duties.

5. In case of insubordination or misconduct on the part of the Persian signallers, his Royal Highness the Itizad-es-Sultaneh engages to use his best endeavours in lawfully supporting the authority of the English superintending officer, exercised under the last rule. On the other hand the English officer engages that the bounds of that authority shall in no way be exceeded.

6. The English officer shall have nothing whatever to do with receipts of money. A Mirza will be appointed at each station, who will be directly responsible for the accounts to the Itizad-es-Sultaneh. But the English superintending officer shall render to his Royal Highness, or any person who may be appointed by the Persian Government, such account of the telegrams dispatched under his authority, as may be sufficient for full information.

These rules, however general in some sense, are understood to have special application to the second wire.

Article VI. In filling up vacancies which may occur among the signallers employed under Article IV., the English telegraph officer shall give the preference to natives of Persia, provided they be qualified in his estimation, by the knowledge of the English language and other attainments necessary for this service, to perform the duties required.

Article VII. As the telegraph offices of these two wires ought to be distinct, the Persian Government shall build a new office adjoining the existing one, wherever there are not separate rooms.

App. No. 2.

Article VIII. If any injury befall the second wire, or delay occur through press of traffic, the first wire, which is specially used for internal communication in Persia, shall give assistance to the second wire, and *vice versa*.

Article IX. For every message of 20 words or less, from Khanikin to Bushire, or *vice versa*, one toman five krans and eight shahis, in Persian money, or 14s. in English money, shall be charged, with proportionate rates for the intervening towns. The Persian Government accepts the tariff laid down in the last Convention between Turkey and England, so far as regards the rates of messages sent by the two Governments from Bushire to India, and from Khanikin to Constantinople or Europe.

Article X. The yearly receipts will be credited to the Persian Treasury; but, should they reach a higher sum than thirty thousand (30,000) tomans, the surplus will be made over to the officers of the English Government for the cost of their establishment.

Article XI. All Indian messages, at whatever part of the line, or from whatever place received, shall be given over to the second wire, and the accounts regularly kept.

Article XII. Should the traffic so continuously increase, as to demand more in one day than the fair day's work on the second wire, the excess of telegrams shall be handed over for dispatch to the first wire, the money received on them being separately credited to the Persian Government. The adjustment of this matter shall rest with the Itizad-es-Sultaneh, and the English superintending officer. This Article is quite irrespective of the provision for mutual assistance in the event of a slight and temporary delay.

Article XIII. The cost of all other than Indian or submarine cable messages shall be separately credited to the Persian Treasury, although conveyed by the second wire.

Article XIV. The relative values of coin shall be calculated, for purposes of account, at the following rates:—

One pound sterling = 25 francs = 22 krans.

One shilling = 1 franc 25 centimes = 1 kran 2 shahis.

One penny = 10 centimes = 2 shahis.

As a rule, accounts shall be kept in English, and payments made in Teheran, in Persian currency.

Article XV. The telegraph accounts shall be made up by the English superintending officer monthly, and sent to Constantinople, where, by comparison with the cable and Turkish accounts, they will be checked by the British Commissioner appointed for that purpose. On the return to Teheran of the audited accounts from Constantinople, the amount due to the Persian Government will be certified by the English officer, and speedily paid every six months, as stated in the last Article. The above account shall always be open to the inspection of the telegraph agent of the Persian Government at Constantinople, or any person recognised by the Persian Minister at the Ottoman Court for the settlement of accounts of international traffic on the Persian-Turkish line.

Article XVI. The telegraphic regulations drawn up at Paris, on the 13th of April, Anno Domini One thousand eight hundred and sixty-five, shall be carried out under the superintendence of the Persian Government, so far as not opposed to the terms of the present Convention or the institutions of Persia.

Article XVII. Any disagreement arising between the telegraph employés of the two Governments shall be referred to their Excellencies the Persian Minister for Foreign Affairs, and the British Minister at Teheran, in order that, after necessary investigation, a just decision may be pronounced.

Article XVIII. This Convention shall take effect from the opening of correspondence on the second wire, and remain in force for five (5) years from the day that a telegram is first dispatched thereby. At the expiration of the five years, it shall be null and void. If at any time within the term appointed, the capabilities of Persian telegraphers for their work shall be proved to the satisfaction of the chief of the Persian telegraphs and the English telegraph officer, the full period shall be curtailed, and the line made over altogether to the Persian Government.

Article XIX. The present Convention shall be ratified and the ratifications exchanged at Teheran within five months, or sooner if practicable.

Done at Teheran on the twenty-third of November, Anno Domini One thousand eight hundred and sixty-five.

(signed) C. Alison. (L. S.)
Meerza Saeed Khan. (L. S.)

— No. 3. —

CORRESPONDENCE respecting the Construction of a TELEGRAPH LINE through *Persia*.

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COPY of the AGREEMENT with the PERSIAN GOVERNMENT, arranged by Mr. *Eastwick*, in December 1862, for the purpose of Constructing a LINE of TELEGRAPH through *Persia*, and of all CORRESPONDENCE relating thereto.

No. 1.

Mr. *Merivale* to Lord *Wodehouse*.—(Received 18 May.)

My Lord,

India Office, 17 May 1861.

I AM directed by Sir Charles Wood to forward herewith, for Lord John Russell's information, the copy of a letter and its enclosure, which has been addressed to the Persian Ambassador at this Court, regarding a proposed agreement between the Indian and the Persian Governments for constructing a line of telegraph through Persia to India.

I have, &c.

(signed) *Herman Merivale*.

App. No. 2,

Enclosure 1, in No. 1.

Sir C. Wood to Meerza Djaaffer Khan.

Sir,

India Office, 17 May 1861.

IN accordance with the understanding at the last interview which I had the pleasure of having with your Excellency, I beg to forward to you a memorandum of the terms on which I am of opinion that an agreement might be made between the Persian and Indian Governments for the construction of a line of telegraph from the Turkish frontier, through Persia, to Bunder Abbas, which shall form a component part of a line of telegraph from this country to India; and, in doing so, I request that your Excellency will express to his majesty the Shah, the gratification with which Her Majesty's Government will co-operate with his Majesty in establishing a system of communication which cannot fail to be of mutual advantage to both countries.

In order to save the next season for work, it would be necessary to take immediate measures for providing the stores which must be sent from this country. I have therefore to inquire whether, in the opinion of your Excellency, his majesty the Shah will concur in the expediency of commencing operations in October next.

I have, &c.
(signed) C. Wood.

Enclosure 2, in No. 1.

MEMORANDUM of proposed Terms of Agreement.

1. THAT the line should commence at Bagdad, proceed from thence to Tehran, and, from that city, *viâ* Ispahan and Sheraz, to Bunder Abbas.

2. That the expense of constructing the work should be shared equally by the two countries.*

3. That the line should be executed under the superintendence of British officers, to be selected by the Secretary of State for India.

4. That the line should consist of two wires, one of which should be for the exclusive use of the Persian and British Governments respectively. If either wire should become unserviceable, the one in good order should be available for both Governments.

5. That the expense of working and maintaining the line be divided between the two Governments; but that each Government should be entitled to be repaid the amount of this charge from the value of the messages sent by them respectively, according to the rates specified in a tariff to be determined on.

6. As the line, when finished, will be the property of the Persian Government, the sums advanced by the British Government for the construction of the line should be repaid to them by the value of the messages sent by them beyond that required for defraying their share of the maintenance and working the line, calculated as above.

7. In the event of the line being destroyed by subjects of the Shah, or in the event of the British and Indian Governments being deprived of its use by the act of a subject of the Persian Government, before the British Government is repaid under Clause 6, the sum due to the British Government should be repaid to them by the Government of Persia.

No. 2.

Earl Russell to Mr. Alison.

Sir,

Foreign Office, 28 May 1861.

† No. 1.

I TRANSMIT for your information a copy of a letter from the India Office,† enclosing a communication which Secretary Sir Charles Wood has addressed to the Persian Ambassador at this Court, respecting a projected agreement between the Persian and Indian Governments for the construction of a telegraph through Persia to India.

I shall be glad to receive any observations which you may have to make upon this subject.

I am, &c.
(signed) Russell.

(Extract.)

No. 3.

Earl de Grey and Ripon to Lord Wodehouse.—(Received 3 June.)

India Office, 1 June 1861.

IN continuation of my letter, dated the 17th instant, I have to forward herewith, by desire of Sir Charles Wood, copy of a letter which has been received from the Persian Ambassador at this Court, and of the reply thereto, regarding the construction of a line of telegraph through Persia.

* In carrying out this condition it should be understood that the Persian Government will provide the timber posts, the inland carriage, and the labour; the Indian Government supplying the iron wire, insulators, &c., at such ports as may be decided on.

Enclosure 1, in No. 3.

(Extract.)

Meerza Djaaffer Khan to Sir C. Wood.

(Translation.)

Claridge's Hotel, 20 May 1861.

I HAVE the honour to acknowledge the receipt of your letter of the 17th of May, and as I find that certain matters contained in it are not exactly in conformity with the wishes which I expressed to you at our recent interview, I beg to trouble you with the following observations on the points at issue:—

The Persian Government is not in itself at all anxious about the construction of telegraphs in the Persian territory, because it feels that there are many other branches of public expenditure that are of more importance to the country; and if his majesty the Shah could be thus induced to support such an undertaking, it would be mainly with a view of thereby securing the friendship and good feeling of the English Government. It appears to me that two modes of proceeding, in regard to the telegraph, offer themselves for consideration.

1st. The British Government might obtain the sanction of Persia to the construction of a telegraphic line upon Persian soil from Bagdad towards Kurrachee by whatever route might be thought advisable, the Persian Government being granted in return the privilege of transmitting a certain number of words daily through the telegraph, free of expense; and the telegraph and its revenues becoming the property of the Persian Government, after remaining for a certain number of years in the hands of the British constructors (a proposition to this effect has indeed been already made from Paris to the government of Persia); and the Persian Government would on its part engage that the material required from the country for the use of the telegraph should be supplied at the market rates, and would further use all due exertion in protecting the line.

The other mode of proceeding would lie in the construction of a telegraph from the Bagdad frontier (not from the city of Bagdad) to Bunder Abbas, at the joint expense of the English and Persian Governments, under certain conditions which I previously mentioned, and which I have now the honour to repeat; namely, that as there is really no public call for a telegraph in Persia itself, nor any possibility of the results obtained from it in the country being at all commensurate with the expense of making it, it would be necessary, in order to interest his majesty the Shah in the undertaking, and to induce him to join in the construction of the line, that there should be a handsome bonus offered by the British Government, such as the supply of wire, without deducting its expense from the value of messages transmitted, or the direct allowance of a sum of money independently of all joint outlay.

Enclosure 2, in No. 3.

(Extract.)

Sir C. Wood to Meerza Djaaffer Khan.

India Office, 31 May 1861.

I HAVE the honour to acknowledge the receipt of your Excellency's letter, dated the 20th instant, and with regard to the modified arrangements which you have proposed for taking the line of telegraph from this country to India through Persia, I have to state that, if instead of the proposed plan submitted with my letter of the 17th instant, his majesty the Shah would prefer that the line from the frontier near Bagdad to Bunder Abbas should be altogether constructed and worked by British officers, and at the expense of the Indian Government, Her Majesty's Government will not object to the arrangement, upon the condition that the line should remain in the hands of the Indian Government for a certain number of years, say 25, all expenses being paid and all receipts being retained by them, and that after this period, during which the Persian Government should have the privilege of transmitting a certain number of words daily free of expense, the telegraph and its revenues should become the property of the Persian Government, all expense attending the working and maintaining it being then, of course, borne by the government, who should undertake to keep it in perfect working order and to convey the messages of the British and Indian Governments at a rate to be mutually agreed on.

No. 4.

(Extract.)

Earl Russell to Mr. Alison.

Foreign Office, 6 June 1861.

WITH reference to my Despatch of the 28th ultimo, I transmit for your information a copy of a letter from the India Office,* enclosing further correspondence which has passed between the Secretary of State and Meerza Djaaffer Khan, on the proposed construction of a telegraph through Persia to India.

You will perceive that the Persian Ambassador has proposed to modify the terms of agreement with regard to this projected telegraph which were communicated to his Excellency on the 17th of May, and that Sir Charles Wood has stated in his letter to the Persian

App. No. 2. Ambassador of the 31st ultimo, the conditional modification to which he would agree, in the event of the non-acceptance of his original proposal by the Persian Government.
 The Persian Ambassador is now on his way back to Persia, and will probably reach Tehran soon after my present instruction, and it is not, therefore, likely that much time would be lost, by waiting for his arrival, in obtaining a decision with regard to the proposed telegraphic line.

No. 5.

Mr. *Merivale* to Lord *Wodehouse*.—(Received 7 June.)

My Lord,

India Office, 6 June 1861.

WITH reference to my letters of the 17th May and 1st June, regarding the negotiations which have been going on for taking a line of telegraph from Turkey, through Persia, to India, I am desired by Sir Charles Wood to request that Sir Henry Bulwer may be instructed by Lord John Russell to tell Colonel Kemball that he is not to adopt measures for continuing the line from Bagdad to Bussorah, or any other place, without further orders from the Government.

It would at the same time be desirable that Sir Henry Bulwer should be asked to ascertain whether, in the event of the line from Bagdad to India, by Bussorah and the Persian Gulf, being superseded by one overland through Persia and Beloochistan, the Turkish Government would not consider that the Indian Government had fulfilled their engagement by connecting Bagdad with the proposed Persian line at the frontier near that place, instead of taking the line on to Bussorah.

I have, &c.
 (signed) *Herman Merivale*.

No. 6.

Mr. *Alison* to *Earl Russell*.—(Received 17 October.)

My Lord,

Camp near Tehran, 4 September 1861.

I RECEIVED the letter enclosed, in copy, from the Musheer-ed-Dowleh, on the 24th ultimo.

I was encouraged to hope, from the tenour of this communication, that the government of the Shah was prepared to enter upon the subject of the telegraph line to India through Persia; but I was informed by the Minister for Foreign Affairs that it was the King's intention to wait for the arrival of Meerza Djafer Khan from Tabreez, and, under the instruction from your Lordship's office, I have assented to this course.

Meanwhile much valuable time is being lost by the dilatory movements of the ex-Ambassador; and, although he has been summoned by telegraph to proceed hither forthwith, I learn by a telegraphic dispatch received yesterday, that he has not yet left Tabreez, and cannot, therefore, be expected to arrive here under 20 days at least.

I elicit from the Minister of Foreign Affairs that the Shah's government has some misgivings as to its ability to protect the proposed line to Bunder Abbas, unless the British Government should consent to defray the expense.

His Excellency observed, "to protect the Tabreez line, which is on the safest route in Persia, we are obliged to employ 200 horsemen. To afford equal protection to the Bunder Abbas line would require nearly 2,000, and surely the Musheer-ed-Dowleh could not have meant that the expense of maintaining these should be defrayed by Persia."

These remarks, however, have reference only to the clause suggesting that the line should be constructed by and reserved for the exclusive use of the Indian Government for a certain number of years.

In this case the advantage to be derived by Persia, of having a certain number of words conveyed daily free of expense, would not compensate for the heavy expense attending the protection of the line.

I think it would be desirable that a gentleman conversant with the subject of telegraphic communication in all its details should be attached to this mission, pending the negotiations.

I have, &c.
 (signed) *C. Alison*.

Enclosure in No. 6.

(Extract.)

Meerza Djafer Khan to Mr. *Alison*.

(Translation.)

10 August 1861.

THANK God, I have reached Tabreez in good health on my return from London. It was my intention to proceed without delay to the capital. But, owing to the non-arrival of the baggage of this Embassy, and with a view to the arrangement of certain matters connected with this Province, it became necessary that I should remain some time at Tabreez.

The British Government being desirous that a telegraph should be extended from Bagdad to Kurrachee, and that an arrangement to that effect should be made as soon as possible

possible with the Persian Ministers, and also that the necessary materials should this year be conveyed to Bunder Abbas, I gave a promise to Sir Charles Wood that I should do everything in my power to reach Tehran soon.

If you deem it expedient that no more time should be lost, you might, without waiting to hear further from me, begin to discuss the settlement of this question with the Minister for Foreign Affairs, Meerza Saeed Khan.

Please God, this important affair will, through your good exertions and zeal for the interests of both Governments, and for the welfare of Persia, be brought to a speedy and satisfactory result.

It is not improbable that I may reach Tehran before the termination of your negotiations.

App. No. 2.

No. 7.

Mr. Hammond to Mr. Merivale.

Sir,

Foreign Office, 8 November 1861.

I AM directed by Earl Russell to transmit to you, to be laid before the Secretary of State for India, copies of a Despatch and of its enclosure from Her Majesty's Minister in Persia,* respecting the proposed line of telegraph through that country to India. Mr. Alison suggests that some person conversant with the subject of telegraphic communication in all its details should be sent out to Tehran, to remain there during the negotiations with the Persian Government; and I am to state that Lord Russell would be glad to know whether Sir Charles Wood deems it expedient to act upon this suggestion by appointing such a person to proceed to the Persian capital.

* No. 6.

I have, &c.
(signed) *E. Hammond.*

No. 8.

Mr. Melvill to Mr. Hammond.—(Received 27 November.)

Sir,

India Office, 26 November 1861.

I AM directed by the Secretary of State for India in Council to acknowledge the receipt of your letter of the 8th instant, and to state, in reply, that instructions will be sent to the Government of India to take immediate measures for deputing to Persia an officer in all respects qualified, not only to assist in the negotiations, but to advise as to what may be the most suitable direction for the line of telegraph.

I am, &c.
(signed) *J. Cosmo Melvill.*

No. 9.

(Extract.)

Earl Russell to Mr. Alison.

Foreign Office, 2 December 1861.

INSTRUCTIONS will be sent to the Government of India to take immediate measures for deputing to Persia an officer in all respects qualified, not only to assist in the negotiations, but to advise as to what may be the most suitable direction for the line of telegraph.

No. 10.

(Extract.)

Mr. Alison to Earl Russell.—(Received 14 December.)

Tehran, 5 November 1861.

ON the 24th ultimo the Under Secretary of State for Foreign Affairs called upon me, on the part of the Meerza Saeed Khan, and stated that the Persian Government accepted the proposals made on the part of Her Majesty's Government for the construction of the telegraph, with certain additional conditions, viz.:—

1. That in case of England being at war with some other state, and Persia being induced by that state to stop the working of the line, then Persia should pay to England the whole expense incurred in the construction and working of the line, deducting the amount which may have been received up to that time for messages.

2. That every person employed for the protection of the line, whether Agent, Gholaum, or Sarbaz, that is, mounted or foot patrol, should be paid by the British Government.

3. That there being a tract of country in the direction of Scinde over which Persia claimed authority, but which would not pay for holding, the English should for the present protect the line in that tract of territory, but give to Persia a paper setting forth that the claim of Persia to that tract was not invalidated, and if Persia should hereafter be strong enough to protect the line, then the British Government would resign the protection of it into the hands of Persia.

App. No. 2.

The first part of these conditions, the Under Secretary states, had been proposed by the Musheer-ed-Dowleh to Sir Charles Wood, and accepted by him, although it does not appear in the correspondence from the India Office forwarded to me by your Lordship.

With respect to the second condition, it might be impolitic on the part of Her Majesty's Government to refuse to contribute in a liberal spirit towards the protection of the line, for such a course might serve as an excuse for its frequent interruption. But it will be necessary to come to a full understanding on this subject, more particularly as the insertion of the word "Sarbaz," or soldier, would seem to imply an intention on the part of the Persian Government to provide for a certain number of its troops.

The Musheer-ed-Dowleh thinks that 6,000 *l.* per annum will cover all expenses.

With respect to the third additional clause, I think it is immaterial whether Her Majesty's Government agree to it or not.

With the view of affording Her Majesty's Government the fullest information on this subject, as well as to state with indisputable accuracy the text of the proposed additions, I have endeavoured to procure them in writing, and in a more developed state, from the Persian Minister for Foreign Affairs; but, although promised to me several times, the paper will not be forthcoming, I fear, in time to go by this messenger.

The Musheer-ed-Dowleh, in the mean time, called upon me with the evident intention of committing me to an acceptance of the proposed additions; but I told him that it was impossible for me to form a just appreciation of them, unless I received them in writing.

In the event of Her Majesty's Government being able to come to a decision on the information thus far conveyed to it, I would suggest that a Draught of Convention, or Agreement, be prepared at the Foreign Office, and sent out by a gentleman conversant with the details of the telegraphic system.

No. 11.

Mr. *Alison* to Earl *Russell*.—(Received 14 December.)

My Lord,

Tehran, 6 November 1861.

WITH reference to my Despatch of yesterday's date, respecting the proposed telegraphic line through Persia, I have the honour to enclose copy and translation of a paper which has been just sent to me by the Persian Minister for Foreign Affairs.

The report of the First Meerza, conveying his Excellency's message, is also enclosed in translation.

This Memorandum contains the additional articles stipulated for by Persia, as already reported, in a more stringent form, with an additional article, by which Persia may at any time purchase the line, and take upon itself the expense of protecting it; and which, if ever carried into effect, would annul the right of the British Government to maintain possession for 25 years.

There is no time before the departure of the messenger to see the Minister for Foreign Affairs on this subject, but I shall inform his Excellency that I have referred the question to the decision of Her Majesty's Government.

I have, &c.
(signed) *C. Alison*.

Enclosure 1, in No. 11.

(Translation.)

MEMORANDUM.

Tehran, 6 November 1861.

WITH regard to the carrying the line of telegraph from Bagdad to the Port of Kurra-
chee, through the Persian territory, the following conditions have been proposed:

1st. The expenses of construction shall be defrayed by the English Government from first to last.

2ndly. The line shall remain in the hands of persons appointed by the said English Government, without the interference of any other party, for 25 years, and during the said period the profits of the line shall be received by the English Government.

3rdly. The Persian Government shall have the right to transmit a number of words, which shall be agreed upon, to any place it may desire, in the form of question and answer, without payment.

4thly. The Persian Government shall issue a stringent order that in every province the materials for the telegraph shall be sold to the English officers at the current price of the day, and no higher price shall be demanded.

5thly. The Persian Government shall use its utmost endeavour to protect the line.

6thly. If the English Government shall be at war with a foreign Government, and the Persian Government, through the influence and at the instigation of that foreign power, shall stop (the extension of) the telegraph line through its own territories, then the
Persian

Persian Government shall be bound to pay, after deducting the profits, the balance of expenses incurred by the English Government for the line.

The above conditions have been submitted to his majesty the Shah, and, in accordance with his decision, the Persian Government will accept them with the following additional provisos:—

That the English Government shall pay the expenses of protecting the line, as far as the Persian Government has the power and authority to protect it.

Also, that the English Government shall engage that whatever power and authority, and proprietary right the Persian Government from former times to the present day possessed and possesses, from Bunder Abbas to the frontier of Scinde, shall remain *in statu quo*, without augmentation or diminution.

Also, that whenever the Persian Government shall, from any cause whatever, desire to increase its power in those territories, the English Government shall in no way whatever either overtly or secretly oppose the same.

Also, that if the Persian Government, through the increase of its authority and power, should be able to undertake the protection of the line in those its territories, then the expense of protecting the line there also shall be defrayed by the English Government.

If the Persian Government should at any time consider it desirable to reimburse the English Government for the expenses of the telegraph from Khanakeen to the other extremity of its territories, after deducting the profits received during the intervening period, and shall not require the expenses for protecting the line, then the telegraph from Khanakeen to the aforesaid point, both as regards the property and the profits, shall belong to the Persian Government.

Minor points, which do not require to be specified at present, shall be settled between the agents of the two Governments when the work is commenced.

Enclosure 2, in No. 11.

(Translation.)

Meerza Sultan Khan to Mr. Alison.

6 November 1861.

THE Persian Minister for Foreign Affairs having this day sent for me, gave me the Memorandum which had been written regarding the telegraph, and said that his majesty the Shah had requested that the British Minister should have the Memorandum clearly translated and sent to the English Government.

If the English Government had given to the British Minister such full powers as that he did not require a second permission, then it might be arranged that the contract be concluded. If not, the British Minister might communicate the matter to the British Government, and, after obtaining the sanction of his Government, the Persian Government was ready to conclude the contract, in accordance with the conditions specified in the Memorandum.

No. 12.

Mr. Hammond to Mr. Merivale.

Sir,

Foreign Office, 17 December 1861.

WITH reference to my letter of the 6th instant, enclosing a copy of a telegram from Her Majesty's Ambassador at the Porte, stating that the Persian Government were willing to accept the proposals of Her Majesty's Government for the construction of a line of telegraph through Persia, with three additional conditions, I am directed by Earl Russell to transmit to you, to be laid before Secretary Sir C. Wood, a copy of a Despatch from Her Majesty's Minister at Tehran, reporting the nature of these additional conditions, and giving his opinion with respect to them.

I am to add that a further Despatch from Mr. Alison on this subject, of the 6th of November, has been marked by him as having been sent in copy to the India Office.

I have, &c.
(signed) *E. Hammond.*

No. 13.

(Extract.)

Mr. Alison to Earl Russell.—(Received 23 January 1862.)

Tehran, 19 November 1861.

FERROOKH KHAN called upon me a few days ago, and dwelt much on the subject of the projected telegraph through Persia. He expressed an anxious desire that it should be carried out.

I observed to his Excellency that it was a pity the proposals made by Her Majesty's Government had not been accepted unconditionally by Persia.

App. No. 2.

On my observing that, though I had tried to elicit a clear answer, I was still kept in the dark as to the probable cost of protecting the line; Ferrookh Khan assured me that Her Majesty's Government need not trouble their minds on this score. The expense of protecting the line now established between Tehran and Tabreez could at any moment be ascertained, and taken as a basis whereon to reckon the cost of protecting the line between Khanakeen and Bunder Abbas. The amount would not, in his opinion, exceed, at the utmost, 30,000 tomans (14,500 *l.*) a year.

I then took occasion to remark that it would have been better had the conditions relative to the country between Bunder Abbas and Scinde been altogether left out; for these might require consideration and involve a delay of some time; while, if the telegraph was to be made, no time should be lost.

Ferrookh Khan thought that Persia ought not to be blamed for making some allusion to, and thus avoid future misunderstanding respecting, a country which undoubtedly belonged to her, but over which she was not at present prepared to exercise a direct control.

He concluded by expressing a strong hope that I would do my utmost to induce Her Majesty's Government to adhere to their intention of extending the telegraphic line through Persia, which he looked upon as a matter of great importance to England, and as an immense boon to this country.

Subsequently to this interview, I received a message from the Persian Minister for Foreign Affairs, that little weight need be attached to the stipulation regarding Persia's right to buy up the line at any time. Persia was never likely, his Excellency said, to pay the large sum requisite for this purpose. He added, that it was also very unlikely that action would ever be taken on the stipulation referring to Beloochistan.

The result of my inquiries respecting the telegraph between Tehran and Tabreez is, that its construction cost about 36,000 tomans (17,000 *l.*); that, besides the persons employed at its four stations, about 39 in number, it is protected by 200 mounted guards, two for every "Farsakh" or four miles; that half of these guards, being exempted from taxes, cost about 1,200 *l.* a year, and the other half about 2,500 *l.*, besides the usual subsistence allowance of a few pence a day to every man. The posts on this line are made of poplar, and cost about 8*s.* 6*d.* each. Those on which the bells are fixed cost about 4*l.* each.

The person who superintends this line thinks that the construction of one from Khanakeen to Bunder Abbas would cost at least 50,000 *l.*; and that it would be a very important precaution to have a Persian Commissioner of high rank appointed, who should have the charge of supplying us with all requisite materials.

No. 14.

Mr. Baring to Mr. Hammond.—(Received 23 January.)

Sir,

India Office, 22 January 1862.

I AM directed by Sir Charles Wood to acknowledge the receipt of your letter of the 17th ultimo, with its enclosures, from Mr. Alison, announcing the conditions upon which the Persian Government has consented to accept the proposals made for the construction of a line of telegraph through Persia.

These conditions were embodied in the Persian Minister for Foreign Affairs in the Memorandum, a translation of which Mr. Alison has forwarded as Enclosure No. 1 of his letter of the 6th November last.

I am to offer the following observations upon the new articles proposed by the Persian Government, which commence with that numbered 6 in the Memorandum.

Sir Charles Wood cannot anticipate that the Persian Government will ever act in so unfriendly a manner towards Her Majesty's Government as to interrupt the communication by telegraph through Persia to India, at the instigation of a foreign power, whilst friendly relations between Great Britain and Persia are continued. In such a case, however, Her Majesty's Government would clearly be entitled to demand that the net expenses incurred by the Government of India in the construction and defence of the line should be paid by the Persian Government, and Sir Charles Wood does not see any objection to the insertion of an article in which the Persian Government admits this liability.

Sir Charles Wood cannot agree to the next new article, which stipulates that the whole expenses of protecting the line shall be borne by the English Government. No reliable estimate of the cost of protection has been furnished; but the Secretary of State for India in Council will undertake to pay half the total expense to be incurred by the Persian Government for the protection of the line between Khanakeen and Bunder Abbas, a distance of about 1,300 miles, provided that the contribution does not exceed 6,000 *l.* per annum; that payment is to cease if the communication is interrupted from want of sufficient protection; and that the cost of repairing any damages or injury to the line, resulting from the want of protection, shall be deducted from the next payments.

With regard to the third condition, Sir Charles Wood is quite ready to agree to a stipulation that whatever claims the Persian Government may possess to the territory between Bunder Abbas and the frontier of Scinde, shall not be affected by any arrangement for the construction of the telegraph between those points; but he must decline to enter into any prospective arrangement as to the protection of the line through that country.

Sir

Sir Charles Wood has no objection to offer to the remaining new article, under which the Persian Government may at any time obtain possession of the telegraph by payment of the net expenses of its construction and defence.

Sir Charles Wood is disposed to agree with the suggestion contained in Mr. Alison's letter of the 19th November, that it would very much facilitate the construction of the line of telegraph if a Persian Commissioner of high rank is appointed who shall have charge of supplying all the requisite materials.

With reference to the concluding paragraph of Mr. Alison's letter of the 5th November, I am directed to acquaint you that Sir Charles Wood has suggested to the Government of India to depute Major Patrick Stewart, late Officiating Superintendent of the Indian Telegraphs, to Persia, in order to supply Mr. Alison with the technical information required by him.

I am, &c.
(signed) *T. G. Baring.*

No. 15.

Earl Russell to Mr. Alison.

Sir,

Foreign Office, 18 February 1862.

HER Majesty's Government have had under their consideration your Despatches of the 5th, 6th, and 19th of November last, respecting the conditions upon which the Persian Government consents to accept the proposals of the British Government for the construction of a telegraphic line through Persia.

These conditions were embodied by the Persian Foreign Minister in a Memorandum which was enclosed in your Despatch of the 6th of November.

I have now to state to you as regards the new articles proposed by the Persian Government, which commence with that numbered 6 in the above-named Memorandum, that Her Majesty's Government cannot anticipate that the Persian Government will ever act in so unfriendly a manner towards this country, as to interrupt the communication by telegraph through Persia to India, at the instigation of any foreign power whilst friendly relations exist between Persia and Great Britain.

In such a case, however, Her Majesty's Government would clearly be entitled to demand that the net expenses incurred by the Government of India in the construction and defence of the line should be paid by the Persian Government, and there does not appear to be any objection to the insertion of an article in which the Persian Government admits this liability.

Her Majesty's Government cannot agree to the next new article, which stipulates that the whole expenses of protecting the telegraphic line shall be borne by the English Government.

No reliable estimate of the cost of protection has been furnished; but the Secretary of State for India in Council will undertake to pay half the total expense to be incurred by the Persian Government for the protection of the line between Khanakeen and Bunder Abbas, a distance of about 1,300 miles, provided that the sum to be contributed by the Indian Government does not exceed 6,000 *l.* per annum; that payment is to cease if the communication be interrupted from want of sufficient protection, and that the cost of repairing any damages or injury resulting to the line from the want of protection shall be deducted from the next payments.

With regard to the 3rd condition, Her Majesty's Government are quite ready to agree to a stipulation that whatever claims the Persian Government may possess to the territory between Bunder Abbas and the frontier of Scinde shall not be affected by any arrangement for the construction of the telegraph between those points; but Her Majesty's Government must decline to enter into any prospective engagement as to the protection of the line through that country.

Her Majesty's Government have no objection to the remaining new article, under which the Persian Government may at any time obtain possession of the telegraph by paying the net expenses of its construction and defence; and they are disposed to agree with the suggestion made in your Despatch of the 19th of November, that it would very much facilitate the construction of the line if a Commissioner of high rank were appointed, who should have the charge of supplying all the requisite materials.

I have to add, that the Secretary of State has suggested to the Government of India to depute Major Patrick Stewart, late Officiating Superintendent of Indian Telegraphs, to Persia, in order to supply you with the technical information which you require.

I am, &c.
(signed) *Russell.*

App. No. 2.

No. 16.

Mr. *Alison* to Earl *Russell*.—(Received 28 February.)

My Lord,

Tehran, 17 January 1862.

THE Ottoman Minister has mentioned to me that, at an audience which he had of the Shah a few days ago, His Majesty expressed a great desire for the establishment of an electric telegraph between Tehran and Bagdad; indeed, that the King seemed so earnest on the subject, that he assured Hayder Effendi that if the Porte began the extension of its wire from Bagdad at once, he would be ready to join it at Khanakeen on the frontier.

So far back as the 13th of October 1860, I conveyed, at the King's desire, a message of a similar nature through Her Majesty's Ambassador at Constantinople; but, although the reply was favourable, no further step was taken in the matter here.

Looking to the number of Persian merchants and other subjects established throughout Turkey, and of pilgrims of all ranks who resort to the shrines of Kerbela and Mecca, it is anticipated that the establishment of such a line would be amply remunerative.

I have, &c.
(signed) *C. Alison*.

No. 17.

Mr. *Baring* to Mr. *Hammond*.—(Received 11 March.)

Sir,

India Office, 10 March 1862.

WITH reference to your letter of the 17th December last, and to my reply of the 22nd January, I am directed by the Secretary of State for India in Council to acquaint you that the Governor General of India in Council has selected Major Patrick Stewart, of the Bengal Engineers, and late Officiating Superintendent of Telegraphs in India, to proceed to Tehran, and to remain there attached to the Mission, during the continuance of the negotiations respecting the formation of a line of telegraph through Persia.

I am, &c.
(signed) *T. G. Baring*.

No. 18.

Earl *Russell* to Mr. *Alison*.

Sir,

Foreign Office, 12 March 1862.

WITH reference to the last paragraph of my instruction to you, of the 18th ult., I have to inform you that the Governor General of India in Council has selected Major Patrick Stewart, of the Bengal Engineers, to proceed to Tehran, and to remain there attached to the British Mission during the continuance of the negotiations for the formation of a line of telegraph through Persia.

I am, &c.
(signed) *Russell*.

No. 19.

Mr. *Alison* to Earl *Russell*.—(Received 23 May.)

My Lord,

Tehran, 25 April 1862.

YOUR Lordship's Despatch, of the 18th of February, respecting the construction of the proposed telegraphic line through Persia, reached me on the 12th instant, and I lost no time in communicating its contents to the Persian Government.

On the 22nd April I received a message to the following purport from the Minister for Foreign Affairs, which was confirmed to me personally by his Excellency on the following day:—

"The Persian Government, being on the most friendly terms with that of England, was anxious to meet the wishes of the latter as far as might be regarding the proposed line of telegraph. The Paper of Conditions sent by the Persian Government to Mr. Alison had been framed in that spirit, and was all that Persia could possibly agree to in return for the concession of permission to construct the telegraph. The English Government seemed to think that Persia had not gone so far as she might be induced to do, and therefore in Lord Russell's Despatch various modifications of the Persian conditions had been proposed. The Shah was, therefore, obliged to say that he could not consent to any alteration whatever of the said conditions, nor could he agree to undertake anything which, perhaps, might be found difficult for him to carry out.

"There

"There were many public works of utility which it would be desirable to carry out besides the telegraph; but looking to the calls for military matters, &c., the resources of Persia were not adequate to meet them; and, indeed, the King had been surprised that the British Government should have limited the sum to be appropriated by it for the protection of the line, before it has ascertained what the expense of protection would be."

The subject of the telegraph may thus be considered to be completely disposed of for the present.

I have, &c.
(signed) C. Alison.

No. 20.

Mr. Alison to Earl Russell.—(Received 2 July.)

My Lord,

Tehran, 30 May 1862.

I AM informed by the Turkish Minister that, having received full powers from the Porte to conclude a convention for the establishment of the telegraphic line between Bagdad and Tehran, in pursuance of a strong desire expressed on the part of the King, as reported in my Despatch of the 17th January, he lost no time in communicating with the Persian Government on the subject.

Haidar Effendi was not a little surprised at being informed, in reply, that the King had changed his mind, and now meditated establishing a telegraphic line between Resht and Tehran.

I learn that it is the intention of the Russian Government to complete their telegraphic line to Tiflis, and to extend it, if possible, to Tabreez.

I have, &c.
(signed) C. Alison.

No. 21.

(Extract.)

Mr. Merivale to Mr. Hammond.—(Received 11 September.)

India Office, 10 September 1862.

It is evident that a second line from Bagdad, through Persia, to a suitable place on the coast, where it might be joined to the line through the Persian Gulf, would be of great value whether as an alternative or auxiliary line; and the most convenient place for such purpose would be Bushire. The great objection to the line hitherto proposed through Tehran, Ispahan, Shiraz, and Bunder Abbas, was owing to the great insecurity and consequent difficulty of providing for the protection of the last section of the route; but no such objection offers to a line to Bushire. The latter is the chief Persian seaport, and the country between it and Shiraz is perfectly tranquil.

Sir Charles Wood would, therefore, recommend that Her Majesty's Minister at Tehran be instructed to re-open negotiations with the Persian Government, with the view of ascertaining whether they are disposed to sanction the construction of a line of telegraph from Bagdad to Bushire, through Tehran, Ispahan, and Shiraz; such a line would offer greater advantages to Persia than one to Bunder Abbas, and would be free from the difficulties, political or otherwise, attending the latter. It may be expected, therefore, that proposals regarding it would be favourably received; but Mr. Alison might be directed to inquire on what conditions its construction would be likely to be sanctioned, and to submit the same for the consideration of Her Majesty's Government before committing himself by any formal offer.

No. 22.

(Extract.)

Earl Russell to Mr. Alison.

Foreign Office, 11 September 1862.

I TRANSMIT for your information a copy of a letter from the India Office, stating that it would be very desirable to have a second line from Bagdad through Persia, to a suitable place on the coast, where it might be joined to the line through the Persian Gulf. I have accordingly to instruct you to re-open negotiations with the Persian Government, with the view of carrying out the wishes of Her Majesty's Government, as set forth in the India Office letter.

App. No. 2.

No. 23.

Mr. Melvill to Mr. Hammond.—(Received 18 October.)

Sir,

India Office, 17 October 1862.

I AM directed by the Secretary of State for India to inform you that it has been determined to effect telegraphic communication with India, in the first instance, by means of a cable to be laid down the Persian Gulf, and that it is intended to establish a station at Bushire, and, if necessary, at or near Bunder Abbas. I have accordingly to request that Earl Russell may be moved to issue instructions to Her Majesty's Envoy at Tehran to obtain the necessary permission from the Government of the Shah for that purpose.

I am, &c.

(signed) *J. Cosmo Melvill.*

No. 24.

Earl Russell to Mr. Alison.

Sir,

Foreign Office, 18 October 1862.

I HAVE been informed by the Secretary of State for India that it has been determined to effect telegraphic communication with India, in the first instance, by means of a cable to be laid down the Persian Gulf, and that it is intended to establish a station at Bushire, and also, if necessary, at or near Bunder Abbas. I have accordingly, in compliance with Sir Charles Wood's request, to instruct you to apply to the Persian Government for the necessary permission for that purpose.

I am, &c.

(signed) *Russell.*

No. 25.

(Extract.)

Mr. Alison to Earl Russell.—(Received 16 December.)

Tehran, 4 November 1862.

WITH reference to your Lordship's Despatch of the 11th of September, respecting a line of telegraph from Bagdad to Tehran and the Persian Gulf, I have the honour to report that I have recommended the subject to the favourable consideration of his Majesty the Shah, and that I have directed Mr. Thomson to communicate more fully on this matter with the Persian Ministers.

I take this opportunity of acquainting your Lordship that the Shah is making arrangements to carry out a line of telegraph to the Turkish frontier near Bagdad, the cost of which is to be defrayed out of the Government Treasury, and that a company is now being formed to lay down a telegraphic wire from the capital to Shiraz. The Porte on its part prolongs its telegraph to meet the Persian line.

It must be always borne in mind that telegraphic lines in Persia are always getting out of order

No. 26.

(Extract.)

Mr. Thomson to Earl Russell.—(Received 3 January 1863.)

Tehran, 3 December 1862.

I HAVE the honour to report that I have to-day received a formal assurance from the Shah, conveyed to me verbally through the Minister for Foreign Affairs, that his Majesty had decided upon at once undertaking, at his own expense, the construction of a line of telegraph from Khanakeen, on the Bagdad frontier, to Bushire, through Tehran, Ispahan, and Shiraz, which is intended to be in connection with the proposed telegraph to India through the Persian Gulf.

Since Mr. Alison's departure, I have had frequent interviews with the Persian Ministers, with a view to ascertaining from them the most reasonable terms upon which they would sanction the construction of a telegraph on this line by the English Government; and at length, after a good deal of discussion, they stated to me the conditions which the Persian Government would be disposed to accept in such an arrangement. Although these terms have now been set aside by the resolution subsequently adopted by the Shah, it may not be uninteresting to your Lordship to learn what they were; and I therefore enclose, for your Lordship's information, a Memorandum in which they are embodied.

To-day I received a note from Meerza Saeed Khan, of which a translation is inclosed, announcing that he had received orders from the Shah to make a communication to me on the

the part of his Majesty, and I accordingly waited upon his Excellency during the afternoon. He stated that the terms which it was proposed to offer to Her Majesty's Government had yesterday been submitted to the Council of Ministers, who had approved of them, and recommended his Majesty to sanction their being forwarded to England. The Shah had, however, said, that an arrangement of this nature, if really carried out, would probably lead to endless embarrassing discussions hereafter between the Persian Government and the English mission; and that he was, therefore, of opinion that it would be better and more convenient for both parties if he caused the line to be constructed at his own expense, and undertook all the responsibility of working and guarding it himself. This proposition, the Minister of Foreign Affairs continued, had been fully discussed by the king and his ministers, and, it having been agreed to, his Majesty had ordered him to inform me officially of the determination arrived at, in order that I might communicate the same to Her Majesty's Government. His Excellency added, that the Shah had estimated the expenses of constructing this line at 100,000 tomans, but that a larger sum would not be objected to in order to insure its being of a permanent and durable character; that orders had already been given by his Majesty to commence at once purchasing and collecting the materials which were procurable in this country, and that no time would be lost in obtaining the necessary wire and other articles required from Europe.

I took an opportunity, while asking for additional particulars regarding the number of wires to be laid down, and the period at which the line would be likely to be completed, to request his Excellency to transmit this message to me in writing, in order that I might forward a translation of it to your Lordship, and he promised to consult his Majesty on the subject, and send me a reply after doing so.

As it appears in the letter from the India Office, which formed the enclosure to your Lordship's Despatch of September 11th, that the telegraph through Persia is only desired as an alternative or auxiliary line to that which is now being carried out between Bagdad and Bussorah, it may be considered preferable, I imagine, by your Lordship, that the Persian Government should itself undertake the construction of the line without the English Government being committed to any engagements with Persia, or involved in any pecuniary liability with respect to this measure.

When this line is completed, should the Turkish Government carry out their intention of extending their telegraph from Sivas to Erzeroum, from which place they might be induced to bring it up to the Persian frontier, there would be little difficulty in persuading the Shah to carry on the telegraph which now exists between Tehran and Tabreez to meet the Turkish line, and by this means the English Government would be enabled to avail themselves of two distinct and separate lines all the way from Sivas to Bushire, between which points the real danger of interruption to our telegraphic communication with India is to be apprehended.

Enclosure 1, in No. 26.

MEMORANDUM of Terms which the Persian Ministers had agreed to offer to the English Government, previous to the determination of the Shah to construct the Line between Khanakeen and Bushire at his own expense.

1. THE expenses of construction of the whole line to be defrayed by the English Government from first to last.
2. The line to remain in the hands of persons appointed by the English Government, without the interference of any other party, for a period of 25 years from the completion of the line, and during the said period the profits of the line to be received by the English Government; and after this period the telegraph and its revenues to become the property of the Persian Government, all expenses attending the working and maintaining it being then borne by the Persian Government, who undertake to keep it in perfect working order, and to convey the messages of the British Government at the rates usually charged on this line.
3. During the above period of 25 years the Persian Government to have the right to transmit, free of charge, to any station within its own territories, messages to the extent of 500 words per diem.
4. The Persian Government to agree to provide the materials for the construction of this line of telegraph to the English officers in every province at the current price of the day.
5. The Persian Government to undertake to protect this line of telegraph from the frontier at Khanakeen, to Bushire, in consideration of receiving from the British Government the sum of 25,000 tomans annually. This payment to cease so long as the communication may be interrupted from want of sufficient protection, and the cost of repairing any damages or injuries resulting to the line from the want of protection, to be deducted from the next payment.
6. The Persian Government to issue an edict making the possession of such English telegraphic stores as can be identified a penal offence.

App. No. 2.

Enclosure 2, in No. 26.

(Translation.)

Meerza Saeed Khan to Mr. Thomson.

3 December 1862.

It is necessary that I should meet you to-day, in order to convey to you a communication from his Majesty the Shah. I therefore beg to trouble you with the request that you will do me the pleasure to call upon me this afternoon, should you not be otherwise engaged, when I will state to you the message which his Majesty has been pleased, in consideration of the friendship subsisting between the two governments, to send you.

No. 27.

(Extract.)

Mr. Eastwick to Earl Russell.—(Received 31 January 1863.)

Tehran, 19 December 1862.

THE state of the negotiations as regards the telegraph from Khanakeen to Tehran, and thence to Bushire, at the date of my arrival at Tehran, was as follows:—On the 4th of November, just before his departure, Mr. Alison had informed your Lordship that the Shah was arranging to carry a line from Tehran to Khanakeen, and that a Company was being formed to construct one from Tehran to Shiraz. Mr. Alison added, with much truth, "that telegraphic lines in Persia," that is, made and managed by Persians, "are always getting out of order."

After Mr. Alison had gone, Mr. Thomson, as instructed, communicated more fully regarding the telegraph with the Persian Ministers. On the 3rd of this month Mr. Thomson informed your Lordship of the final determination of the Persian Government to construct the line themselves. On the 8th, Meerza Saeed Khan assured Mr. Thomson that the line would be constructed as strongly and durably as possible; but he, at the same time, pointed out that that perfection must not be looked for which is found in European lines.

In reply to an application made by Mr. Thomson, in obedience to your Lordship's Despatch of October 18th, respecting stations at Bushire and Bunder Abbas, for what may be called the English line from Bagdad to India, the Minister for Foreign Affairs transmitted a letter, of which a copy is enclosed, and which appears to me to be a polite refusal.

On a consideration of all these circumstances, I could not regard the negotiation as at all in a promising state.

The general assurances of the Persian Government as to the proper construction and speedy completion of the line, could not be regarded as forming any guarantee whatever, and the scheme adopted to-day might be abandoned to-morrow. It was almost certain that, as Mr. Alison anticipated, the line would be badly made and faultily worked if left entirely to Persian management, and it seemed more than probable that there would be great difficulty in arranging for the carrying out the plans of Her Majesty's Government as regards the English stations at Bushire and Bunder Abbas. I therefore determined to attempt at once to put things on a more certain and satisfactory footing, and spoke both to Meerza Saeed Khan and the Amin-ed-Dowleh, and having ascertained that they would give me their cordial support, I wrote out a short Convention. The Ameen-ed-Dowleh made some alterations in this, and I then took the paper to the King, and read it to his Majesty at my private audience. The King declared himself satisfied with it; but he made a number of autograph alterations, and returned it to me in a few hours. I trust that, in the form in which the Convention is now drawn out, it will be satisfactory to Her Majesty's Government. It seems to me to possess all the advantages with none of the disadvantages of the original agreement between Sir C. Wood and the Musheer-ed-Dowleh. It is certain that the line will be well constructed and worked under Colonel Stewart, and the expense to Her Majesty's Government will only be that officer's, or his successor's, pay. Even this might be taken out in messages, and I had inserted an article to that effect, but the Amin-ed-Dowleh recommended me not to press it. I had also inserted that the quarterly audit should be attended by the Ameen-ed-Dowleh and the English Minister, with a view to protect Colonel Stewart against any annoyance. The Shah, however, struck this out, and the Ameen-ed-Dowleh explained to me that, as Colonel Stewart would order what he wanted, but would not make payments, no responsibility as regards money could attach to him.

I have only to add, that if your Lordship should think it advisable, I could get any not very important alterations made in the Convention by obtaining the Shah's permission to allow the Ameen-ed-Dowleh and Meerza Saeed Khan to discuss and frame such alterations with me, without the intervention of other parties.

Should your Lordship approve of the Convention, I would respectfully request that, to prevent any delays or vacillation, I may be informed of the acceptance of the articles by electric telegraph through Bagdad. At the same time, perhaps, it would be well if I were made acquainted with the scale of payments for messages to which Her Majesty's Government would assent.

Enclosure 1, in No. 27.

(Translation.)

Meerza Saeed Khan to Mr. Thomson.

8 December 1862.

MR. THOMSON desired to be informed at what time the Persian Government intended to commence the construction of the telegraph, and when it would be completed. The reply is, that hitherto the Persian Ministers had not proposed to themselves to extend the telegraph to Bushire, but had simply intended to lay down a line from Tehran to Khanakeen. Two months ago they sent a special agent to Europe to purchase and forward to Persia the necessary wire, which he is now engaged in doing. Reckoning the time usually required for loads coming from Trabizond to Tehran, and considering the severe season now set in, it may be expected that these materials will arrive at the capital, if no accidents occur, about Now-Roos (March 21st), and whenever it arrives, in the commencement of spring, the work of laying down the wire from Tehran to Khanakeen will be begun, and in three months it will be completed. But with regard to that portion of the line from Tehran to Bushire, the wire has not yet been procured, nor have the necessary materials been prepared. Now, however, in compliance with the Shah's orders, another special agent will be sent to Europe with money to obtain the necessary wire; and steps will likewise be taken to get ready the materials in this country, so that the moment the wire is received operations will at once be commenced, and from the date of its reaching Tehran, in the space of four months, please God, the line to Bushire will be completed.

2. As to the question of how many wires it was proposed to lay down, it is evident that messages can be transmitted both ways by the same wire, and that it is not absolutely requisite to have two wires, one for the question, the other for the answer. The Persian Government would, therefore, consider this matter, and the requirements of the case. Should they perceive that one is insufficient for the number of communications, and that two wires would be more advantageous, they will not object to add to the number of wires; but in the event of one wire proving to be sufficient, and perhaps even there not being any necessity for using it the whole 24 hours, then, of course, the telegraph will remain with only one wire.

3. It was asked what description of wire and materials would be used in the construction of this line, and whether it was intended to carry out the work in a substantial manner, calculated to render it permanent, and diminish the risk of communications being interrupted, or whether it was proposed to construct the line similar to those now existing between Tehran, Tabreez, and Resht. Now it is certain that the Persian Government will endeavour to the utmost not to throw away its money, but to construct a telegraph which will be strong and durable, and not easily injured; but it is possible that accidents may occur, as elsewhere, either from violent storms of rain or snow, by which the line might be damaged, however solidly constructed, as sometimes occurs even in Europe. This is quite another question, and no one can feel certain that such accidents may not happen. The Tabreez and Resht wires, however, have never been injured in this way, and are in perfect working order. If they have ever suffered from these causes no real injury has been done to them. Telegraphs in Persia differ from those in Europe thus far: in European countries, the wire is carried along a straight and level road by the side of the railway, but in this country it has to be taken by most difficult and wild tracts, and at one time over a mountain of great height, and at another through a valley of considerable depth. This adds much to the difficulty both of the construction and protection of the telegraph.

Enclosure 2, in No. 27.

(Translation.)

Meerza Saeed Khan to Mr. Thomson.

9 December 1862.

I HAVE received your letter, dated the 5th instant. You state therein that a station was required at Bushire, and also, if necessary, at Bunder Abbas, for the telegraph which was, in the first instance, to be laid down in the Persian Gulf, in order to communicate with India, and you requested me to obtain the necessary permission for this purpose.

I have, in compliance with your request, represented the matter to the Shah, and his Majesty replied that the Persian Government would lay down a telegraphic wire on land to the seaside, and all that was requisite for forwarding communications, &c., would be prepared at that station; and that, under these circumstances, it would be unnecessary for the English Government to make any preparations on land at Bushire or Bunder Abbas which would become useless after the Persian Government had completed its telegraph, with all that was requisite, thus entailing on the British Government a certain pecuniary loss.

App. No. 2.

Enclosure 3, in No. 27.

ARTICLES of Convention respecting the Construction of a Telegraph between Khanakeen and Bushire, proposed by Mr. *Eastwick* to the Shah, at a private Audience on Wednesday the 17th of December 1862, subject to the approval of the British Government, and accepted by the Persian Government on the same condition.

Article I.—THE exalted Government of Persia considers it necessary to construct a line of telegraph without delay from Khanakeen to the capital, Tehran, and from Tehran to the port of Bushire, and consents that, whenever the British Government may require to communicate by that telegraph, it shall communicate accordingly by the said telegraph, paying for the same at rates to be fixed hereafter.

Article II.—The Persian Government will assign the sum sufficient for this telegraph—that is, for laying it down, and the purchase of such materials as are not procurable in Persia, or are better obtainable in Europe.

Article III.—The Persian Government agrees to purchase the materials, which are better procurable in Europe, of the English Government, and the English Government agrees to furnish the said materials at reasonable rates.

Article IV.—In order that this line of telegraph may be constructed in the best possible way, and may be efficiently worked, the Persian Government is willing to entrust it to the superintendence and direction of an English engineer officer, who will be paid by his own Government; and the Persian Government will also fix a period for the employment of the said officer, in order that he may show how to construct and work the line. And his Royal Highness the Itizad-oo-Sultaneh, who is the Minister for Public Works, and his Excellency the Amin-ed-Dowleh, will have cognizance of what the said officer does.

Article V.—The said officer will be fully empowered to call upon the Persian authorities to supply any materials that he may think requisite for this work, and the said authorities will make no alteration in his requisitions, unless in the case when it is impossible to get the thing wanted. But a Persian officer will always accompany the said superintendent, who is to be informed of what he does, and of the price of the materials called for, and the accounts shall be audited by the aforesaid Prince and his Excellency the Amin-ed-Dowleh, and the audit shall be taken quarterly, and a report of it shall be drawn up and printed in the "Tehran Gazette."

Article VI.—In order to increase the friendship between the two Governments and carry out this work, the English Government engages to convey to the Persian frontier such materials as, with the approval of the Persian Minister to the Court of St. James's, shall be purchased of the English Government, and to receive the purchase-money for the said articles from the Persian Government, by five instalments, in five years.

Written at the bottom of the Autograph of the Minister for Foreign Affairs.

The Persian Government agrees to this Convention if the English Government is willing, and the line will be commenced immediately, according to the above stipulations.

No. 28.

Mr. *Merivale* to Mr. *Hammond*.—(Received 6 February.)

Sir,

India Office, 6 February 1863.

WITH reference to Mr. *Eastwick*'s Despatch to Lord Russell, dated 19th December last, of which a copy has been forwarded to this office, I am directed by Secretary Sir Charles Wood to state that the Convention with respect to a telegraph from Khanakeen *via* Tehran to Bushire, therein reported to have been conditionally agreed to by the Shah, ought, in his opinion, to be at once accepted by the British Government; and I am to request that his Lordship may be moved to telegraph to the Chargé d'Affaires at Tehran, advising him accordingly of its acceptance.*

I am, &c.

(signed) *Herman Merivale*.

No. 29.

(Extract.)

Mr. *Baring* to Mr. *Hammond*.—(Received 20 February.)

India Office, 19 February 1863.

I AM directed to request that you will move Earl Russell to communicate the following particulars to Her Majesty's Minister in Persia:—Arrangements detailed in a separate memorandum,

* A telegram to that effect was accordingly sent through Her Majesty's Embassy at Constantinople.

memorandum, herewith enclosed, will be immediately made for providing stores for a line which in the first instance will have a single wire only, but will eventually require a second.

English superintendence of the line should be continued for a period of five years.

Colonel Stewart will not be able personally to superintend the land line until the cable shall have been laid down in the Persian Gulf.

Lieutenant Champian has already been directed to proceed to England, but will return to Persia, accompanied by a suitable staff, by the time his services will be required in that country.

The superintendent will require four superior assistants, and 10 or 12 of the class of non-commissioned officers or trained artificers, or one for about every 100 miles.

The charge for messages from Bagdad, *viâ* Tehran, to Bushire, may be fixed at first at 10*s.* 6*d.* for 20 words, though hereafter it may be found advisable to reduce it as low as 6*s.* 6*d.* for the same number of words.

In the memorandum alluded to above, and which Sir Charles Wood requests may be sent *in extenso* to the Minister at Tehran, full information is furnished as to all the operations that will become necessary during the next six months, or till the European staff will be on the spot.

Enclosure in No. 29.

MEMORANDUM of Proposed Persian Telegraphs from Khanakeen to Tehran and Bushire.

AGREEABLY to the terms of the Convention recently concluded, the European stores required for the whole extent of the line (including wire, insulators, tools, and instruments) shall be at once procured in this country for dispatch to Persia. The actual extent of line is computed at 1,090 miles. But it is desirable to allow for such contingencies as loss, waste, or breakage of stores; and it is therefore proposed to supply them in quantities sufficient for 1,200 miles of line. The greater part of these stores must be sent by sea to Bushire and Bussorah; those sent to the latter port being intended for part of the line from Khanakeen towards Tehran, must be forwarded by river steamer to Bagdad. Two months may be required for the manufacture and shipment of these stores, and four months at least must be allowed for the voyage to the Persian Gulf. It is therefore improbable that they will be delivered at Bushire before August, or at Bagdad before September next. The delay likely to be thus caused, makes it desirable to supply a larger proportion of the stores by the Tribizond and Tabreez route than the simple consideration of comparative cost of transport would seem to indicate. On these grounds it is proposed to send, *viâ* the Black Sea to Trebizond, stores sufficient for the line from Tehran to Hamadan (about 200 miles), and from Tehran to Kashan (about 170 miles), and the proportional distribution to the different ports would then be—

	Miles.
To Trebizond stores for - - - - -	375
To Bushire " - - - - -	575
To Bussorah (for Bagdad) - - - - -	250
Total Miles - - - - -	1,200

The weight per mile of the stores may be taken as follows:—

	Lbs.
Wire No. 6, B. W. G. - - - - -	560
Insulators, Screws, &c. - - - - -	120
Proportion of Tools, &c. - - - - -	20

TOTAL per Statute Mile - 700

The stores will be subdivided and packed with special reference to facility of transport on baggage animals.

The stores sent *viâ* Trebizond may be looked for at that port towards the end of May.

Operations may, however, be commenced at once in Persia by procuring and distributing strong timber posts along the whole line.

It will probably be found advantageous to complete the arrangements for the supply of the whole of the supports, and for their transport to convenient depôts at short intervals along the line, before commencing to erect any of them. The disadvantages of using perfectly "green" and undried timber will thus be in some degree lessened. Further, when the timber for erecting the posts shall have arrived, this work should be commenced in the more level, open, and straight portions of the route, leaving till the arrival of European assistants the completion of those more difficult and exceptional portions of the line where alone it is of importance to select with care the exact direction of the line and positions for its support. For example, the posts may be erected for the whole distance from Tehran to Ispahan (260 miles) without the least difficulty, excepting as regards a length of perhaps 20 miles in the neighbourhood of Kohrood. It is at such exceptional portions of the line, where the road of necessity winds considerably, that the strongest and most substantial

App. No. 2.

posts should be provided; and it is hoped that European inspectors may be on the spot to superintend and aid in the construction of these portions, long before the ordinary parts of the main line are completed.

In erecting the posts on the latter portions, the following are the only points to be observed:—

1st. The line must everywhere follow the general direction of the regular road, all the supports being so placed as to be within full view of, and easily accessible from, the road. As a general rule none of them should be at a greater distance than one quarter of a mile from the road, and ordinarily they should be within from 50 to 100 yards.

2d. In the open, straight portions of the line, 22 posts per mile will be sufficient, of which at least two should be of not less than about 6 inches in diameter at the top. The remainder need not be more than 4 inches in diameter, but it should be understood that these dimensions refer to the extremity or smallest portion of the post. The posts should ordinarily be not less than 18 feet, of which from 3 to 3½ feet should be below the surface of the ground, and 14½ or 15 feet above. In such portions of the line as that near Kohrood, already referred to, or in the more difficult parts of the hilly country between Shiraz and Bushire, strong posts in the proportion of about 30 to the mile should be provided. But as they will frequently be placed on ridges or slight elevations, it is not necessary to stipulate for a length of more than 16 feet in all for the posts to be used in such localities.

The fixing of insulators and straining and attaching the wire will thus be made a later and a distinct operation, during the whole of which European assistance and co-operation can be provided.

The establishment and organisation of offices and mode of working the completed line need not as yet be referred to, further than by saying that these subjects shall be considered and arranged for when providing the European staff for the earlier operations of construction.

(signed) P. Stewart.

No. 30.

(Extract.)

Mr. Hammond to Mr. Merivale.

Foreign Office, 21 February 1863.

I AM directed by Earl Russell to transmit to you herewith, to be laid before Secretary Sir Charles Wood, with reference to your letter of the 19th instant, a copy of the instruction on the subject of telegraphic communication through Persia, which will be forwarded to Her Majesty's Chargé d'Affaires at Tehran on the 26th instant.*

No. 31.

Mr. Hammond to Mr. Thomson.

Sir,

Foreign Office, 26 February 1863.

I SENT you on the 11th instant, through Her Majesty's Ambassador at Constantinople, the following telegram:

"The stores, wires, and insulators for the Persian telegraph cannot be at Bushire till August next; but work may be at once commenced by procuring and distributing strong timber posts along the whole line, which should everywhere follow the regular road.

"The other points will be dealt with hereafter."

With reference to the last paragraph of the above telegram, I have now to inform you that the arrangements detailed in the enclosed memorandum will be immediately made by the India Office for providing stores for a line which, in the first instance, will have a single wire only, but which will eventually require a second.

English superintendence of the line should be continued for a period of five years.

Colonel Stewart will not be able personally to superintend the land line until the cable shall have been laid down in the Persian Gulf.

Lieutenant Champain has already been directed to proceed to England, but will return to Persia, accompanied by a suitable staff, by the time his services will be required in that country.

The superintendent will require four superior assistants, and 10 or 12 of the class of non-commissioned officers or trained artificers, or one for about every 100 miles.

The charge for messages from Bagdad, *via* Tehran, to Bushire, may be fixed at first at 10s. 6d. per 20 words, though hereafter it may be found advisable to reduce it as low as 6s. 6d. for the same number of words.

Full

Full information is furnished in the accompanying memorandum as to all the operations which will become necessary during the next six months, or until the European staff will be on the spot.

App. No. 2.

I am, &c.
(signed) *E. Hammond.*

No. 32.

Mr. *Eastwick* to Earl *Russell*.—(Received 28 March.)

My Lord,

Tehran, 7 February 1863.

WITH reference to your Lordship's Despatch of the 18th of October, I have the honour to state that I have not mentioned the subject of that Despatch to the Persian Government, because I am certain that separate stations for the Turco-Indian line of telegraph at Bushire and Bunder Abbas can be easily obtained by judicious management when the Convention for the Khanakeen and Bushire line is ratified by Her Majesty's Government. Further, I may state that when the ratification takes place, there will be no difficulty about the line being extended from Shiraz or Bushire to Bunder Abbas. I had a distinct assurance from the Itizad-oo-Sultaneh, the Minister of Public Works, that the Shah would undertake that extension.

I believe, therefore, that I am able, before leaving Tehran, to report that I have arranged the whole question of the telegraph, and that the only thing wanting is the approval of Her Majesty's Government.

I have, &c.
(signed) *Edward B. Eastwick.*

No. 33.

Mr. *Baring* to Mr. *Hammond*.—(Received 1 April.)

Sir,

India Office, 1 April 1863.

I AM directed to state, for the information of Earl Russell, that in a conversation which Sir Charles Wood had on the 24th instant with the Persian Minister, on the subject of the proposed line of telegraph from Khanakeen to Bushire, his Excellency explained that, so far as he knew, when the recent Convention regarding that line was prepared at Tehran, the Shah was under the impression that no other connecting line would be made between Bagdad and Bushire, and that the Persian line would consequently obtain the whole of the Anglo-Indian messages passing between those places.

His Excellency then pointed out that his Government might justly blame him if, being now aware of the proposed construction of a competing line through Mesopotamia, he did not endeavour to effect an arrangement as to the division of the messages between the two lines, before committing his Government to expenditure by concurring in the immediate purchase of materials for the Persian line. It was explained to him that any delay in dispatching materials to be sent by a long sea voyage to the Persian Gulf was much to be deprecated, and that, although it was impossible to discuss simultaneously here and at Tehran the terms of the convention, Sir Charles Wood would not object to give an official assurance that Her Majesty's Minister at Tehran should be instructed to discuss with the Shah's Government the question raised by his Excellency, and to come to an equitable arrangement concerning it. His Excellency finally consented to give his formal assent to the immediate purchase of materials, on receiving the written assurance, copy of which is enclosed herewith.

Sir Charles Wood thinks it desirable that what has taken place so far, should be brought immediately to Earl Russell's knowledge. His Lordship shall be made acquainted by a separate communication with the particulars of the arrangement which should, in Sir Charles Wood's opinion, be proposed to the Persian Government.

Sir Charles Wood would suggest for Earl Russell's consideration, that it might be advisable that the Turkish Government should immediately be made aware of the intention to divide, in some way, messages passing from Bagdad to Bushire, or *vice versa*, between the line which will run from Bagdad, by Bussorah, to Bushire, and that which will run from Bagdad to the Persian frontier, near Khanakeen, and thence through Persia to Bushire.

The Turkish portion will be shorter in the latter line than in the former, but the difference is a very insignificant part of the whole line through the Turkish territory. The Turkish Government will, no doubt, readily perceive the advantage which their main line to Bagdad will derive from having an alternative line through Persia to Bushire, in the event of any interruption to the line from Bagdad to Bussorah.

I am, &c.
(signed) *T. G. Baring.*

App. No. 2.

Enclosure in No. 33.

MEMORANDUM.

WHEN the Persian Government shall have constructed a line of telegraph from the Turkish frontier near Khanakeen by Tehran to Bushire, and when the Turkish and English Governments shall have constructed a short connecting line from Bagdad to Khanakeen, and also a line from Bagdad to Bussorah, and thence to Bushire, there will be two alternative lines between Bagdad and Bushire.

Her Majesty's Minister at Tehran will be instructed to discuss and arrange with the Persian Government, on equitable terms, the distribution between the two lines of the telegraphic messages passing between England and India.

(signed) *C. Wood.*

No. 34.

Earl Russell to Sir H. Bulwer.

Sir,

Foreign Office, 2 April 1863.

I TRANSMIT, for your Excellency's information, a copy of a letter from the India Board,* stating what has passed between the Secretary of State for India and the Persian Minister, respecting the proposed line of telegraph between Khanakeen and Bushire, and I have to instruct your Excellency to communicate to the Porte the intention to divide in some way messages passing from Bagdad to Bushire, or *vice versa*, between the line which will run from Bagdad by Bussorah to Bushire, and that which will run from Bagdad to the Persian frontier, near Khanakeen, and from thence through Persia to Bushire.

I am, &c.
(signed) *Russell.*

No. 35.

Mr. Thompson to Earl Russell.—(Received 25 April.)

My Lord,

Tehran, 10 March 1863.

I HAVE the honour to inform your Lordship that during the last few days I have had interviews with the Ameen-ed-Dowleh and Meerza Saeed Khan, on the subject of your Lordship's telegram of the 11th of February, and that this afternoon, by the Shah's desire, I met the Minister for Foreign Affairs and the Prince Itizad-u-Sultaneh, when it was settled that his Royal Highness should at once dispatch agents to procure timber posts in the different districts through which the telegraph is to pass, and to distribute them along the line in the villages which are nearest to the regular road.

The number and dimensions of the posts to be thus provided are: for each mile, 20 posts, 19 feet in length, and five inches in diameter at the top; and two posts, 21 feet long, and 10 inches in diameter at the top, the whole distance being calculated at 1,092 miles.

The above figures will be found to be in accordance with the estimates prepared by Lieutenant Colonel Stewart when in this country.

I have, &c.
(signed) *R. F. Thomson.*

No. 36.

Mr. Baring to Mr. Hammond.—(Received 29 April.)

Sir,

India Office, 28 April 1863.

IN my letter of the 1st instant, it was stated that Sir Charles Wood would, in a separate communication, acquaint Earl Russell with the particulars of the arrangement which should, in his opinion, be proposed to the Turkish and Persian Governments, for the distribution between the two lines of telegraph about to be established from Bagdad to Bushire, of the telegraphic messages passing between England and India.

I am, accordingly, now directed to make the following observations:—

The Indian Government has undertaken to advance the purchase-money of the materials provided from this country for the line through Persia. If a double wire be formed, the money so advanced will, probably, amount to 20,000 £, which, by the terms of the late Convention, will have to be repaid by the Persian Government in five annual instalments. Merely to insure punctual payment of these instalments, it would be advisable for the Indian Government to use the Persian line to at least such an extent as that the net receipts

receipts from Anglo-Indian messages during the first five years should annually amount to one-fifth of the sum advanced; but it is obviously desirable on other accounts that much more than this should be done, and that the use of the Persian line by the Indian Government should be such as to furnish a large annual surplus, the payment of which to the Shah's Government, for its own benefit, would afford to it the best possible inducement to protect the line, and to maintain and work it efficiently. With this view, as well as with that of equally interesting the Turkish Government in the due protection and maintenance of their alternative line from Bagdad to Bussorah, Sir Charles Wood considers that the most convenient arrangement would be that of an equal division of Anglo-Indian messages between the two lines, all messages from India being dispatched through Persia, and all messages to India proceeding by the Turkish line from Bagdad to Bussorah. Such an arrangement cannot, however, be efficiently carried out, unless the Persian as well as the Turkish line be provided with two wires, one of which shall be employed exclusively for the through traffic; and any agreement to the effect indicated above, entered into with the Persian Government, should be made conditional on the adoption of a double wire.

Sir Charles Wood would, therefore, recommend, if Earl Russell sees no objection, that Her Majesty's Minister at Tehran be authorised to make some such proposal as the following:—

Provided the Persian line of telegraph, with a single wire, from Khanakeen to Bushire, be constructed, protected, and worked in an efficient manner, and to the satisfaction of the English officers superintending it, the English Government agrees to dispatch by the Persian line one-fourth part of all the through traffic *via* Bagdad, between Europe and India; and, in like manner, if a second wire be added, and made available exclusively for the transmission of through traffic, to dispatch one-half of the same traffic by the Persian line.

The above agreement might be made binding for a period not exceeding 10 years, at the close of which its terms would be open to revision.

I am further directed to suggest that the necessary communications on the subject should be made simultaneously to the Turkish Government.

I am, &c.
(signed) T. G. Baring.

No. 37.

Earl Russell to Mr. Thomson.

Sir,

Foreign Office, 6 May 1863.

I TRANSMIT, for your information and guidance, copies of two letters from the India Board on the subject of telegraphic communication with India.*

You will learn from these letters the particulars of the arrangement which should, in the opinion of the Secretary of State for India, be proposed to the Turkish and Persian Governments, for the distribution between the two lines of telegraph about to be established from Bagdad to Bushire, of the telegraphic messages passing between England and India, and also what has passed between Sir Charles Wood and the Persian Minister on this subject.

I have now to instruct you to state to the Persian Government, that if the Persian line of telegraph, with a single wire, from Khanakeen to Bushire, is constructed, protected, and worked in an efficient manner, and to the satisfaction of the English officers superintending it, the English Government agrees to dispatch by that line one-fourth part of all the through traffic *via* Bagdad, between Europe and India; and in like manner, if a second wire be added, and made available exclusively for the transmission of through traffic, to dispatch one-half of the same traffic by the Persian line. In the event of the Persian Government agreeing to these terms, you are hereby authorised to make an agreement with them for a period not exceeding 10 years.

I am, &c.
(signed) Russell.

No. 38.

Earl Russell to Sir H. Bulwer.

Sir,

Foreign Office, 6 May 1863.

WITH reference to my despatch of the 2d ultimo, I transmit for your information a copy of a further letter from the India Board,† stating the particulars of the arrangement which should, in the opinion of the Secretary of State for India, be proposed to the Turkish and Persian Governments, with reference to the distribution between the two lines of telegraph about to be established from Bagdad to Bushire, of the telegraphic messages passing between England and India.

I also

* Nos. 33 and 36.

† No. 36,

App. No. 2.

I also enclose a copy of a despatch which I have addressed to Her Majesty's Chargé d'Affaires in Persia upon this subject,* and I have to instruct your Excellency to make the necessary communications to the Porte, with the view of carrying out the arrangement set forth in the India Board letter.

I am, &c.
(signed) *Russell.*

No. 39.

Mr. Thomson to Earl Russell.—(Received 24 May.)

My Lord,

Tehran, 12 April 1863.

I HAVE the honour to inform your Lordship that I this day received a message from the Persian Minister for Foreign Affairs, through one of his secretaries, to say that a report had reached him from the Governor of Kerman, to the effect that English officers were engaged in making preparations to carry a line of telegraph from the Beloochistan frontier by land to Bunder Abbas, and thence on to Bushire, and that, if there was any truth in this statement, he begged that I would take steps to suspend the operations until the matter had been discussed, and an arrangement entered into on the subject at Tehran, as such a line had not been provided for in the Convention lately agreed to by the Persian Government.

I replied that I had no knowledge of the circumstance to which he alluded; that I was informed that the telegraph from Bushire would be taken down the Persian Gulf by means of a submarine cable, which was now being manufactured in England; and that I was not aware that there was any intention of landing the wire at any point in the Persian territory excepting at the two above ports of Bushire and Bunder Abbas.

I have, &c.
(signed) *R. F. Thomson.*

No. 40.

Mr. Thomson to Earl Russell.—(Received 24 May.)

My Lord,

Tehran, 13 April 1863.

I HAVE the honour to enclose translation of a firman which has been addressed by his Majesty the Shah to the Governor through whose districts the Persian telegraph is to pass, instructing them to prepare the posts required for the line, and to have them in readiness at an early date. This firman has been forwarded through two of the Shah's private attendants, Hajee Feramerz Beg and Hajee Einez Beg, the former having proceeded to Ispahan and Shiraz, and the latter to Hamadan and Kermanshah.

I have, &c.
(signed) *R. F. Thomson.*

Enclosure in No. 40.

Firman to the Governors of the Provinces through which the Persian Telegraph is to Pass.†

(Translation).

THE construction of a telegraph being an undertaking of the utmost importance, which, when completed, cannot fail to be of the greatest utility in facilitating business, both Government and private, throughout the Persian dominions, and in promoting the interests of commerce and the welfare of our subjects, it has been determined by a Convention between the Persian Government and the agents of Her Britannic Majesty to establish a telegraphic line of communication between Khanakeen and Tehran, and from the capital to Bushire, which is to be connected with the Bagdad line, and is to be extended by a cable from Bushire to India, to be laid down by the English Government. Of the materials necessary for this work, next to the wires, &c., which have been purchased in Europe, the most important are the timber posts required for stretching the wires, and these are of two kinds, the ordinary post and the straining post. They must, therefore, be procured, and distributed along the road and at the different stations at once; so that, please God, by the end of the present year the line may be completed and in working order. We, therefore, now command that, on the receipt of this firman, you will issue stringent orders to the necessary parties

* No. 37.

† Transmitted to the Mission on 3 April 1863.

parties in your province that for every fursukh (four miles) along the road, 90 ordinary posts and 18 straining posts, according to the following dimensions, are to be prepared and held in readiness within the space of one month :—

Ordinary posts.—Ninety in number, strong, good, and quite straight, six Persian yards long, and five inches in diameter at the top.

Straining posts.—Eighteen in number, from seven and a half to eight yards long, and twice the above diameter.

The receipts for the above are to be made over to the Prince Itizad-oo-Sultaneh, the Minister for Public Works, through Hajee Einez Beg, one of our private attendants, who will superintend these arrangements. You will take care to have our instructions in this respect carried out attentively, so that the posts may be ready to be handed over within the period specified above, and on no account are you to suppose yourself exempt from, or irresponsible for the fulfilment of this command.

No. 41.

Mr. Thomson to Earl Russell.—(Received 20 June.)

My Lord,

Tehran, 12 May 1863.

I HAVE the honour to inform your Lordship, that his Excellency the Ameen-ed-Dowleh some days ago requested that I would suggest to Her Majesty's Government that either Captain Champain, or one of the officers who are to be employed in Persia in laying down the telegraphic wires, should be instructed to proceed to Tehran with as little delay as possible, as, in the opinion of the Persian Ministers, it is desirable that some experienced officer should be on the spot in order that they may have the advantage of his practical knowledge and advice in carrying out the preliminary measures for the construction of the Persian line of telegraph.

I have, &c.
(signed) R. F. Thomson.

No. 42.

Mr. Baring to Mr. Hammond.—(Received 3 July.)

Sir,

India Office, 3 July 1863.

WITH reference to the despatch of the 12th of May from Mr. Thomson, Chargé d'Affaires at Tehran, to Earl Russell, I am directed by Sir Charles Wood to state for his Lordship's information that he concurs in opinion with the Government of the Shah, that it is desirable that either Captain Champain, or some other officer to be employed in laying down the telegraphic wires in Persia, should be instructed to proceed to Tehran with as little delay as possible. If Lord Russell sees no objection to the arrangement, Sir Charles Wood will at once select an officer to proceed as expeditiously as possible to Tehran on telegraphic service.

I have, &c.
(signed) T. G. Baring.

No. 43.

Mr. Thomson to Earl Russell.—(Received 4 July.)

My Lord,

Tehran, 29 May 1863.

WITH reference to your Lordship's despatch of the 18th of October 1862, I have the honour to transmit herewith copy of a despatch addressed by me to the resident in the Persian Gulf, enclosing a translation of a letter from Meerza Saeed Khan to the Governor of Bushire, from which your Lordship will perceive that instructions have been given by the Persian Minister for the construction of a telegraph station at Bushire, which is to be made over to the British Government at an annual rent, for the exclusive use of their employés on the Indian line of telegraph.

I have, &c.
(signed) R. F. Thomson.

App. No. 2.

Enclosure 1 in No. 43.

Mr. Thomson to Colonel Pelly.

Sir,

Tehran, 26 May 1863.

COLONEL KEMBALL having forwarded to me an extract from the report drawn out by the engineer officer recently sent to survey the coast of the Persian Gulf, from which it appears that Resheer had been selected as the spot for landing the cable in the vicinity of Bushire, I have applied to the Persian Government for their permission to establish a telegraph station at that place.

I now beg to enclose copy of an order transmitted by the Persian Minister for Foreign Affairs to the Governor of Bushire, directing him, after consulting with you, and ascertaining the exact point at which the cable is to be landed, to cause a building to be erected as a station for the exclusive use of the English telegraph employés, for which a moderate amount of rent will be received by the Persian authorities.

I have no information as to the amount of accommodation required at this station; but, in order to save time, and to admit of the building being commenced at once, should it be thought advisable to have it ready before the cable is landed, it has been arranged that, in the meantime, a building, containing only a few rooms, should be erected; and, on my being made acquainted with the amount of further accommodation required, I shall take steps to obtain from the Persian Government their sanction to having such additions as may be necessary to be made.

I have, &c.
(signed) R. F. Thomson.

Enclosure 2 in No. 43.

The Persian Minister for Foreign Affairs to the Governor of Bushire.

(Translation.)

18 May 1863.

As you already know, by desire of his Majesty the Shah, the Persian Government are about to construct a telegraph from the frontier of Kermanshah to Bushire, and the English Government, as they may feel disposed, are at liberty to join their telegraphic wires, which are to be brought by a submarine line, to the Persian wires, it is therefore necessary that they should have a telegraph station on the coast, and his Majesty has ordered that a station should be erected for this purpose at Resheer, under the directions of the Prince Itizad-oo-Sultaneh, which is to be given to the British Government for an annual rent. The Prince has written the instructions necessary, and they are now sent to you. In the meantime, as the English cable may shortly reach Bushire, and on its arrival they may require a place at once in which to keep their stores and materials before the regular station is completed, you will now at once, after communicating with the resident, and ascertaining the exact spot where the cable will be landed, proceed to erect a building according to the accompanying plan given by the Prince, in a suitable position, and get it in readiness, so that they may not suffer inconvenience. You will then forward an estimate of the expenses of completing the building, and when you receive orders on the subject, you will have it finished by building the additional portion.

His Majesty has further commanded that the station also required for the employés on the Persian line of telegraph from Bushire to Khanakeen, is to be built alongside of the station constructed for the English telegraph to India, so that, for the better working of the lines, the two stations are not to be apart and distant from each other.

No. 44.

Mr. Thomson to Earl Russell.—(Received 4 July.)

My Lord,

Tehran, 5 June 1863.

I HAVE delayed till now replying to your Lordship's despatch of the 26th of February, in the hope that the Persian Government might be induced to adopt the entire suggestions offered in that communication. The Persian Ministers express themselves fully satisfied with the preliminary arrangements which Colonel Stewart proposes that they should make for the construction of the Persian telegraph, and they are now engaged in preparing the materials required, and in having them distributed along the line, for which purpose they have dispatched agents to the different provinces through which the telegraph is to pass. But with regard to the period during which the line is to be entrusted to the superintendence of English officers, I find that the views of the Persian Ministers do not coincide with those of Her Majesty's Government. It is proposed in your Lordship's despatch that five years should be fixed for this superintendence; but though the Persian Government state that they desire to retain the services of the English agents until such time as the line is in a perfectly efficient state, and until it is found to work to the satisfaction of the British Government, they are not disposed to engage formally that the Persian telegraph should be under the control of English employés for a longer space of time than one year.

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As your Lordship's despatch of the 6th of May, however, which I have just received, authorises me to make an agreement with the Persian Government fixing the amount of messages to be transmitted by their line, on condition that it is constructed, protected, and worked in an efficient manner, and to the satisfaction of the English officers superintending it, I trust that they may now be induced to set aside their present determination on this point, as they cannot fail to perceive that, unless the line is under the control of English officers, it can never be worked with that efficiency which will render it profitable by securing to Persia a full share of the messages transmitted.

With respect to the remaining question of the amount to be charged on such messages, the Persian Government is about to send instructions to Mahmood Khan, authorising him to enter into any arrangement in London which he may consider fair and reasonable.

I have &c.
(signed) *R. F. Thomson.*

No. 45.

Mr. Hammond to Mr. Merivale.

Sir,

Foreign Office, 6 July 1863.

In reply to your letter of the 3d instant, I am directed to request you will inform Sir Charles Wood that Earl Russell concurs in his opinion that it is desirable that Captain Champain, or some other officer, should at once proceed to Tehran to assist the Persian authorities in carrying out the preliminary measures for the construction of the Persian line of telegraph.

I am, &c.
(signed) *E. Hammond.*

No. 46.

Sir H. Bulwer to Earl Russell.—(Received July 18.)

My Lord,

Constantinople, 9 July 1863.

I HAVE the honour to transmit herewith, for your Lordship's information, copy of an official note which I have received from the Porte, in reply to my communication of your Lordship's instructions relative to the division of messages by the Bagdad telegraph.

Your Lordship will perceive that the Porte feels some disappointment at the arrangement proposed to be adopted. I have not myself expressed any opinion on the subject, but merely stated I would transmit the Porte's note to your Lordship.

I have, &c.
(signed) *H. L. Bulwer.*

Enclosure in No. 46.

Aali Pasha to Sir H. Bulwer.

M. l'Ambassadeur,

Sublime Porte, le 7 Juillet 1863.

J'AI reçu et transmis à l'Administration Générale des Télégraphes la note que vous m'avez fait l'honneur de m'adresser, en date du 11 Avril, pour m'informer que le Gouvernement de Sa Majesté Britannique est dans l'intention de se servir également des deux lignes télégraphiques de Bagdad à Bunder-Bushir par Bussorah, et de celle qui sera établie entre Bagdad et Bunder-Bushir en passant la frontière Persane près de Khanakeen.

Nous reconnaissons également l'utilité de l'établissement de cette seconde ligne qui ne peut que rendre plus sûre la communication électrique entre Bunder-Bushir et Bagdad; mais d'après nous on aurait pu mieux choisir la direction qu'on veut lui donner. Une ligne passant par Khanakeen, Zenkiabad, et Carabata, et aboutissant à Kerkiah, présenterait d'autant plus d'avantages qu'elle offrirait plus de facilités soit pour sa pose, parcequ'elle ne rencontrerait pas de grands courants d'eau, soit pour les défenses de construction pour la raison que son parcours serait beaucoup moins long. Après ces considérations électriques une autre plus importante n'a pu nous échapper. Le Gouvernement Impérial ne devant établir et entretenir la ligne de Bagdad à Bussorah que pour unir les Indes Orientales au réseau télégraphique de l'Europe, il nous semble qu'il serait juste que les dépêches Anglaises ne fussent transmises par la ligne Persane qu'en cas d'interruption sur la ligne Ottomane.

En conséquence je vous prie, M. l'Ambassadeur, d'entretenir le Gouvernement de Sa Majesté Britannique et de provoquer de sa part un engagement dans ce sens dans le cas où votre Excellence se rangerait à mon avis.

Veuillez, &c.
(signé) *Aali.*

App. No. 2.

(Translation.)

M. l'Ambassadeur,

Sublime Porte, 7 July 1863.

I HAVE received and transmitted to the General Administration of Telegraphs the note which you did me the honour to address to me, dated the 11th of April, to inform me that the Government of Her Britannic Majesty intends to use equally the two telegraphic lines from Bagdad to Bunder Bushir by Bussorah, and the one which will be established between Bagdad and Bunder Bushir, crossing the Persian frontier near Khanakeen.

We recognise equally the utility of the establishment of this second line, which cannot fail to render the electrical communication between Bunder Bushir and Bagdad more sure; but, in our opinion, the direction which it is intended to give it might have been better chosen. A line passing by Khanakeen, Zenkiabad, and Carabata, and joining at Kerkiah, would offer as many advantages as it would offer facilities either for laying it down, because it would not encounter strong currents of water, or for the expenses of its construction, from the fact that its length would be much less. After these considerations another more important one has not escaped our observation. As the Imperial Government must establish and maintain the line from Bagdad to Bussorah only to unite the East Indies to the telegraphic network of Europe, it seems to us that it would be just that the English despatches should be only transmitted by the Persian line in the event of interruption of communication on the Ottoman line.

I beg you, therefore, M. l'Ambassadeur, to communicate with Her Britannic Majesty's Government, and to propose an engagement in this sense on their part, should your Excellency be of my opinion.

Receive, &c.
(signed) *Aali.*

No. 47.

Mr. *Layard* to Mr. *Merivale*.

Sir,

Foreign Office, 20 July 1863.

I AM directed by Earl Russell to transmit to you, for the information of Secretary Sir C. Wood, the accompanying copy of a despatch from Her Majesty's Ambassador at Constantinople,* inclosing a copy of the reply of the Turkish Government to the communication which he was instructed to make, in accordance with your letter of the 29th of April, with regard to the division of messages to be sent by the Bagdad telegraph.

I have, &c.
(signed) *A. H. Layard.*

No. 48.

Mr. *Thomson* to Earl *Russell*.—(Received August 1.)

My Lord,

Tehran, 4 July 1863.

THE difficulty of transacting business here during the first days of Moharrem, and the subsequent departure of the Shah on a hunting excursion in the neighbouring hills, have occasioned some delay in my obtaining a distinct reply to the proposal which I was directed by your Lordship's despatch of the 6th of May to make to the Persian Government respecting the distribution of messages between the two telegraphic lines from Bagdad to Bushire.

Although the Minister for Foreign Affairs and the Ameen-ed-Dowleh, to whom I was also referred on the subject, both expressed themselves strongly in favour of adding a second wire at once to the telegraph about to be constructed from Khanakeen to Bushire, I have since been given to understand by Meerza Saeed Khan that the Shah was, for the present, not disposed to give his sanction to the additional expense which would be thereby incurred. His Majesty was of opinion that the line should be constructed, as originally proposed, with only one wire, and that they should only engage to add a second when they had ascertained clearly how far it was absolutely necessary, and what the profits were which they were likely to derive from the Persian telegraph. His Excellency said that it was against his advice entirely that the Shah had adopted this view, and that he would again represent to his Majesty the advantages which both he and the Ameen-ed-Dowleh considered that the Persian Government would obtain by providing a double wire, by means of which the Persian telegraph might be worked with perfect efficiency from the outset. His Majesty's reply has not yet been received at Tehran; but, as great uncertainty seems to exist in the minds of many of those about the Court, whose advice is frequently adopted in such matters, as to the success which is likely to attend the establishment of this telegraph, it is probable that no change will take place in his Majesty's views, and that he will not be induced to embark

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in any further outlay for the present than that which they have already consented to in the Convention with Her Majesty's Government.

With respect to the division of messages between the Turkish and Persian lines of telegraph from Bagdad to Bushire, the Shah's Ministers do not appear to share the apprehensions felt by the Persian Envoy in London with regard to the competing line which is now in course of construction by way of Bussorah. They have hitherto regarded the establishment of that line with apparent indifference, and as yet they have not shown any inclination to enter into the arrangement proposed by Sir Charles Wood, which would secure to them a certain share of the telegraphic messages transmitted to and from India.

I have, &c.
(signed) *R. F. Thomson.*

No. 49.

Mr. Melvill to Mr. Hammond.—(Received 8 August.)

Sir,

India Office, 7 August 1863.

I AM directed by Sir Charles Wood to state, for the information of Secretary Earl Russell, that for the purposes of the arrangements in progress for the establishment of telegraphic communication with India, through Turkey, Persia, and the Persian Gulf, some considerable disbursements will have to be made in Persia, in effecting which Sir Charles Wood would, with Earl Russell's permission, wish to avail himself of the agency of Her Majesty's Minister at Tehran. The disbursements for current and miscellaneous expenditure will amount to about 6,000*l.*, and I am to request that Mr. Alison may be apprised that he is empowered, up to the limit, and for the purposes indicated above, to draw Bills on the Government Treasury at Bombay or Calcutta, as may be found most advisable, the local Governments having been requested to honour his drafts accordingly.

I have, &c.
(signed) *J. Cosmo Melvill.*

No. 50.

Mr. Hammond to Mr. Melvill.—(Received 11 August.)

Sir,

Foreign Office, 11 August 1863.

IN reply to your letter of the 7th instant, I am directed by Earl Russell to state to you for the information of Secretary Sir Charles Wood, that his Lordship will instruct Her Majesty's Minister at Tehran to make disbursements on account of the India Office, in connection with the telegraph through Persia; and I am to suggest that you should move Sir Charles Wood to forward to this office for transmission to Mr. Alison a Memorandum containing instructions for his guidance in this matter.

I am to add that the next opportunities for sending despatches to Persia will be on Thursday the 13th, and Thursday the 27th, of this month.

I have, &c.
(signed) *E. Hammond.*

No. 51.

Sir H. Bulwer to Earl Russell.—(Received 12 August.)

My Lord,

Constantinople, 31 July 1863.

WITH reference to your Lordship's despatch of the 6th of May last, relative to the division of messages by the Bagdad telegraph, I have the honour to forward a copy of the Porte's reply, which reached me only this day.

I have, &c.
(signed) *H. L. Bulwer.*

Enclosure in No. 51.

Aali Pasha to Sir H. Bulwer.

M. l'Ambassadeur,

Ministère des Affaires Etrangères, le 31 Juillet 1863.

JE suis aujourd'hui en mesure de répondre à la note que votre Excellence m'a fait l'honneur de m'adresser, en date du 21 Mai, relativement à l'intention du Gouvernement de

App. No. 2.

Sa Majesté Britannique de partager la transmission des dépêches pour les Indes Orientales entre les deux lignes télégraphiques de Bagdad à Bussorah, et de Khanakeen à Bunder Bushire en Perse.

Votre Excellence sait que le Gouvernement Impérial ne doit établir et entretenir la ligne de Bagdad à Bussora que dans l'unique désir de rendre un service au Gouvernement Britannique en réunissant les Indes Orientales au réseau télégraphique de l'Europe. Si la ligne Persane doit être appelée à jouir à part égale avec la ligne Ottomane des revenus de cette ligne, qui consisteront principalement de la transmission des dépêches Anglo-Indiennes, la ligne de Bagdad à Bussorah devient complètement superflue, et onéreuse même, en considération des sommes considérables qui seront dépensées pour son établissement et son entretien.

A notre avis il serait mieux de renoncer à la ligne de Bussorah à Bagdad, et se borner à celle de Khanakeen à Bunder Bushir. Cette ligne, reliée directement avec le câble de Bussora, jouirait dans ce cas de tous les revenus intégralement, et ferait aussi éviter les dépenses pour les fournitures de matériel télégraphique que le Gouvernement Indien devra faire à notre administration.

Veuillez, &c.
(signé) *Aali.*

(Translation.)

Ministry of Foreign Affairs,
31 July 1863.

M. l'Ambassadeur,

I AM enabled to-day to reply to the note which your Excellency did me the honour to address to me on the 21st of May, relative to the intention of Her Britannic Majesty's Government to divide the transmission of despatches for the East Indies between the two telegraphic lines from Bagdad to Bussorah, and from Khanakeen to Bunder Bushire in Persia.

Your Excellency knows that the Imperial Government is going to establish and maintain the line from Bagdad to Bussorah solely with the desire of rendering service to the British Government by joining the East Indies to the telegraphic network of Europe. If the Persian line is to be allowed to share equally the revenues of the Ottoman line, which will consist principally of the transmission of Anglo-Indian despatches, the line from Bagdad to Bussorah becomes perfectly superfluous and even burthensome, on account of the considerable sums which will be expended on its construction and maintenance.

In our opinion it would be better to give up the line from Bussorah to Bagdad, and to confine ourselves to the line from Khanakeen to Bunder Bushire. That line, directly connected with the cable of Bussorah, would profit in that case by all the revenues integrally, and would also cause the expenses to be avoided on account of fittings and telegraphic material which the Indian Government will have to impose on our administration.

Receive, &c.
(signed) *Aali.*

No. 52.

Mr. Melvill to Mr. Hammond.—(Received 13 August).

Sir,

India Office, 12 August 1863.

I AM directed by the Secretary of State for India to acknowledge the receipt of your letter of the 11th instant, and in reply to forward a memorandum by Lieutenant Colonel Steward, in which is embodied all the information required at Tehran regarding the measures which have been, or are about to be, taken in connection with the establishment of the telegraph between Khanakeen and Bushire, and to request that Earl Russell will be pleased to cause a copy thereof to be forwarded to Her Majesty's Ministers in Persia.

I have, &c.
(signed) *J. Cosmo Melvill.*

Enclosure in No. 52.

MEMORANDUM relating to the Persian Telegraph, detailing the steps which have been taken in connection with the Despatch of Stores, &c., up to date.

7 August 1863.

THE distances have been calculated as follows, and in practice will be found sufficiently accurate :—

	<i>Miles.</i>
From Khanakeen to Kermanshah - - - - -	123
„ Kermanshah to Hamadan - - - - -	96
„ Hamadan to Tehran - - - - -	186
„ Tehran to Koom - - - - -	90
„ Koom to Kashan - - - - -	61
„ Kashan to Ispahan - - - - -	109
„ Ispahan to Koomshah - - - - -	48
„ Koomshah to Mooighaut - - - - -	152
„ Mooighaut to Shiraz - - - - -	70
„ Shiraz to Kazeroon - - - - -	67
„ Kazeroon to Bushire - - - - -	100
TOTAL - - -	<i>Miles</i> 1,102

To allow for contingencies, materials for a single wire line, 1,200 miles long, have been, or are about to be, sent out. Cost and detail are given below. The wire will be supported on single insulators on wooden posts, the number of which should be 21 ordinary and three stretching; total, 24 posts per mile. On the straight and open parts of the line 21 or 22 will suffice, while on the other hand it may prove necessary among the more difficult passes (such as those in the neighbourhood of Kazeroon or Khanakeen) to increase the number to 30 posts per mile.

TABLE showing the Number and Detail of Stores sent out.

Amount.	Description of Stores.	Cost in England.	Remarks.
		£. s.	
350 tons	Wire No. 5. B. W. G. - - - - -	6,212 10	} Packed in 900 boxes.
9 „	Steel Wire - - - - -	243 -	
25,200 „	Ordinary single insulators - - - - -	2,205 -	
3,600 „	Stretching ditto - - - - -	690 -	
900 „	Packing cases for insulators - - - - -	285 5	
6 sets	Tools complete in boxes - - - - -	480 -	
28,800 „	Bands for galvanized iron - - - - -	120 -	
1,600 „	Stays for angle posts - - - - -	268 5	
12 „	Field Signalling instruments - - - - -	180 -	
	TOTAL Cost in England - - - £.	10,680 -	

The greater part of these stores will be landed at Bushire, and thence transported on mules along the line towards Tehran; but a proportion enough for 322 miles will be sent on to Bussora, and thence up the river to Bagdad.

The following Table shows the stores despatched up to date for the Persian lines, the whole allowance being for 1,200 miles, of which 878 will be supplied for Bushire, and 322 for Bussora.

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Total to be Sent.		Description of Stores.	Already sent in.					
Bushire.	Bussora.		"Athene."		"Khimjee."		"Jumna."	
Bushire.	Bussora.		Bushire.	Bussora.	Bushire.	Bussora.	Bushire.	Bussora.
240	104	350 tons wire	—	104	246	—	—	—
6	3	9 tons steel ditto.	—	—	6	3	—	—
658	242	900 boxes of insulators.	—	—	100	284	116	—
20,800	8,000	28,800 bands of iron.	—	—	8,960	—	—	7,040
1,200	400	1,600 stays complete.	—	—	—	—	—	—
3	4	12 field instruments.	—	—	—	—	—	—
3	3	6 sets of tools complete.	—	—	3	—	—	3

The insulators are packed in boxes, each containing 28 ordinary and four stretching insulators, so that three boxes contain enough for four miles, or one farsakh of line. The boxes weigh 174 lbs. each, two thus forming a load for one mule.

The "Athene" will probably reach Bussora about the beginning of October, she having left Liverpool on the 30th May.

The "Khimjee Ooddoopee," a quick vessel, sailed on the 30th June, and may be expected at Bushire about the middle of October.

The "Jumna," also a very fast ship, left London on the 15th July, and will probably reach Bushire before the end of October.

The rest of the stores will be despatched as soon as possible, but it is likely that some delay may occur in completing the full number of insulators.

Messrs. Man and Walton will leave England (with one of the inspectors appointed to the line) on the 8th instant, and will be able to give every information and assistance that may be necessary until the arrival of Lieutenant Champain. The latter officer will almost immediately after reaching Tehran proceed to Bushire in time to meet the first of the vessels with stores for that port, and to arrange, in concert with Colonel Pelly and the Persian authorities, the means of transport and distribution.

Two engineer officers have been applied for from India to assist in the work, and a third will leave England *via* the overland route for Bombay, about the end of August, with 10 non-commissioned officers and men of the Royal Engineers trained to the work, and conversant with the practical duties that will be required of them.

The whole line from Khanakeen to Bushire will therefore be divided into five divisions, each division having its one officer or superintendent, one inspector, and two assistant inspectors of the Royal Engineer detachment, while the direction of the whole staff will be in the hands of Lieutenant Champain, who will fix his head-quarters at Tehran.

The following Table shows approximately what the monthly pay of the staff will be, and the additional expenditure which will thus devolve upon the British Mission has already been provided for:—

No.	Rank.	Staff Pay for Military, or Consolidated Pay for Civil Officers.	Pay and Allowance for Military.	TOTAL.
		<i>Rupees per Mensem.</i>	<i>Rupees per Mensem.</i>	<i>Rupees per Mensem.</i>
1	Director - - - -	—	—	—
1	Superintendent - - -	—	—	—
1	Engineer Officer - - -	500	265 12	765 12
1	Ditto - - - -	350	265 12	615 12
1	Ditto - - - -	200	265 12	465 12
1	Civil Officer - - - -	600	—	600 00
1	Ditto - - - -	450	—	450 00
1	—	—	—	—
2	Inspectors - - - -	250	—	500 00
—	Ditto - - - -	200	—	600 00
10	Assistant Inspector - -	Appointed pay -	—	—
	Non-Commissioned Officers of Royal Engineers.	Military and civil for 10.	—	1,550 00
Approximate Total, omitting Pay of the Director (not yet decided), and Travelling Allowance				5,550 00

This sum will be in addition to the actual amount expended in travelling and to Lieutenant Champain's pay, the amount of which has not yet been fixed.

The total monthly expenditure on account of telegraph superintendence, military pay of officers and soldiers employed, and contingencies, will possibly reach in round numbers the sum of 7,500 rupees, and such expenditure will probably commence from the 1st October 1863.

Lieutenant Colonel Pelly, Her Majesty's Resident at Bushire, has already been informed that the approximate weight of stores to be forwarded along the line from Bushire will be as follows :—

	Wire.	Insulators.	Total.
	Tons.	Tons.	Tons.
To Tehran - - - - -	17	4½	21½
„ Koom - - - - -	17	4½	21½
„ Kasham - - - - -	15	4	19
„ Ispaham - - - - -	50	14	64
„ Koomishah - - - - -	15	4	19
„ Shiraz - - - - -	70	19	89
„ Kazeroon - - - - -	25	7	32
TOTAL Tons - - - - -	209	57	266

The remainder of the stores shipped for Bushire will be retained at that port.

Information has also been sent to Colonel Kemball at Bagdad, to the effect that the weight of stores for which carriage will be required at the cost of the British Government, as far as the Persian frontier of Khanakeen, will be as follows :—

	Tons.
Wire - - - - -	104
Insulators and Stores - - - - -	28
TOTAL - - - - -	132

The cost of transport within the Persian territory will of course be defrayed by the Persian Government, and the details of distribution will be arranged in concert with the officer in charge of each section of the line.

(signed) *P. Stewart.*

No. 53.

Mr. Layard to Mr. Merivale.

Sir,

Foreign Office, 13 August 1863.

I AM directed by Earl Russell to acknowledge the receipt of your letter of the 12th instant, enclosing a Memorandum for the use of Her Majesty's Minister at Tehran, on the line of telegraph through Persia now in course of construction; and I am to state to you, for the information of Secretary Sir Charles Wood, that Lord Russell has forwarded the Memorandum to Mr. Alison, and will instruct him to make disbursements on account of the India Office, in connection with the telegraph, but that before giving these instructions his Lordship must request to be furnished with definite directions for Mr. Alison's guidance in making disbursements, no directions on the subject being contained in your above-mentioned letter.

I have, &c.
(signed) *A. H. Layard.*

App. No. 2.

No. 54.

Mr. Melvill to Mr. Layard.—(Received August 14.)

Sir,

India Office, 13 August 1863.

I AM directed by Sir Charles Wood to acknowledge the receipt of your letter of the 20th ultimo, with its enclosures, from Sir H. Bulwer and Ali Pasha, relative to the proposed division of messages by the Bagdad telegraph.

This question originated in the manner explained in Mr. Baring's letter of the 1st April last, in consequence of the Persian Minister refusing to give his approval to the purchase of stores, as stipulated for in Article 6 of the proposed Convention. Sir Charles Wood accordingly gave the written assurance that Her Majesty's Minister at Tehran would be authorized to deal with the question if raised there; and he communicated through the Foreign Office the terms to which he would, in such an event, be willing to consent. It now appears from Mr. Thomson's letter of the 4th July (which is noticed in another letter of this date) that the Persian Government do not raise the question, and Sir Charles Wood has certainly no wish that any stipulation on the subject should be inserted in the Persian Convention. He thinks, however, that the proposal of the Turkish Government that the Persian line should be made use of, in the communication east of Bagdad, only when the more direct Turkish line is interrupted, is open to objection.

The important advantages to be expected from the establishment of a secondary line are admitted by Ali Pasha, but the effect of his Excellency's proposal would be to limit the efficiency of that line; since the mere "local" traffic to be expected on it would consist, almost exclusively, of messages transmitted by Persian signallers, in their own, or in the Turkish language; and it is clear that such a line could not be kept up in the state of efficiency required to make it at once available on an emergency for the whole of the Anglo-Indian traffic, unless the establishments were kept up to their work by the regular transmission of a certain amount of European business.

Mr. Baring's letter to Mr. Hammond of the 1st April pointed out how insignificant, as compared with the extent of the whole Turkish line, is the section the receipts from which would be effected by the withdrawal of a portion of the traffic, and Sir Charles Wood is persuaded that the Turkish Government will recognize the advantage of diverting, with the object above explained, such an amount of through-traffic as will suffice to keep the Persian offices in thorough working order, after their attention has been drawn to the importance of maintaining the alternative line in a state of complete efficiency.

I have, &c.

(signed) J. Cosmo Melvill.

No. 55.

Mr. Melvill to Mr. Hammond.—(Received August 14.)

Sir,

India Office, 13 August 1863.

SIR CHARLES WOOD has been furnished with a copy of a letter from Mr. Thomson to Earl Russell, dated Tehran the 4th July last, upon which he is desirous of making the following observations:—

With reference to the objections entertained by the Shah to the construction of the telegraph between Khanakeen and Bushire, with a double wire, I am to state that Sir Charles Wood agrees in the opinion that it is preferable that the simple operation of establishing a line with a single wire only should, in the first instance, be undertaken.

With regard to the proposed distribution between the Turkish and Persian telegraphs of through messages, I am directed to explain that Sir Charles Wood has no wish that any stipulation on the subject should be embodied in the proposed Convention.

Sir Charles Wood requests that Earl Russell will be good enough to communicate his views on the above points to Her Majesty's Minister at Tehran.

I am further to observe that as the European Staff, and the stores for the telegraph in question, have been despatched, it appears to Sir Charles Wood to be of much importance that the Convention on the subject should be ratified without loss of time.

I have, &c.

(signed) J. Cosmo Melvill.

No. 56.

Earl Russell to Mr. Alison.

Sir,

Foreign Office, 13 August 1863.

I TRANSMIT to you herewith a Memorandum drawn up for your use by Lieutenant Colonel Stewart, respecting the line of telegraph through Persia now in course of construction;* and I have further to acquaint you that I have informed Secretary Sir Charles Wood, in reply to an application which he has made to me, that I shall be ready to instruct you to make disbursements on account of the Indian Office, in connection with the telegraph works, as soon as he has furnished me with instructions for your guidance in doing so.

I am, &c.

(signed) Russell.

* Enclosure in No. 52.

No. 57.

App. No. 2

Mr. *Layard* to Mr. *Melvill*.

Sir,

Foreign Office, 14 August 1863.

WITH reference to my letter of the 3d instant, I am directed by Earl Russell to transmit to you, to be laid before Secretary Sir C. Wood, a copy of a Despatch from Her Majesty's Ambassador at Constantinople,* enclosing a copy of the Porte's reply to the proposal * No. 51. relative to a division of messages sent by the Bagdad telegraph.

I have, &c.

(signed) *A. H. Layard*.

No. 58.

Mr. *Melvill* to Mr. *Hammond*.—(Received August 19.)

Sir,

India Office, 17 August 1863.

I AM directed by the Secretary of State for India to acknowledge the receipt of your letter of the 13th instant, and to acquaint you in reply, that before full details can be given of the disbursements to be made through Her Majesty's Minister at Tehran, on account of the Government of India, in connection with the electric telegraph, it will be necessary that a communication should be addressed to the Government of Bombay, who are responsible for the operations. That Government will, however, be instructed to furnish Mr. Alison with information regarding the disbursements and adjustment of accounts as soon as the final arrangements are matured.

I have, &c.

(signed) *J. Cosmo Melvill*.

No. 59.

Earl *Russell* to Mr. *Thomson*.

Sir,

Foreign Office, 24 August 1863.

WITH reference to your Despatch of the 4th of July, I transmit to you herewith copies of two letters from the India Office,† on the subject of the line of telegraph now in course of construction between Bagdad and Bushire. † Nos. 54 and 55.

You will perceive from these papers that Sir C. Wood concurs in the opinion of the Persian Government, that it would be advisable that the line between Khanakeen and Bushire should in the first instance be constructed with a single wire.

With regard to the division of messages between the two lines of telegraph from Bagdad, Sir C. Wood states that as the question does not appear to have been raised by the Persian Government, he has no wish that any stipulation on the subject should be introduced into the Convention; but he points out the importance of a sufficient number of messages being sent by the Persian line to insure its being kept in a thorough state of efficiency.

It only remains for me, in instructing you to act in accordance with the tenor of the enclosed letters, to call your special attention to the expediency of bringing the negotiations to a speedy conclusion, in order that the Convention may be ratified as soon as possible.

I am, &c.

(signed) *Russell*.

No. 60.

Earl *Russell* to Mr. *Alison*.

Sir,

Foreign Office, 24 August 1863.

WITH reference to my Despatch of the 13th instant, I have to acquaint you that I have been informed by Sir C. Wood that the India Office will have to communicate further with the Government of Bombay with respect to the disbursements which you will be requested to make on account of the telegraph between Khanakeen and Bushire; and that full information on the subject will be furnished to you from Bombay.

You will render such assistance as may be in your power with respect to making disbursements on account of the Government of India, when you have been furnished with the requisite information for your guidance.

I am, &c.

(signed) *Russell*.

No. 61.

Earl *Russell* to Sir *H. Bulwer*.

Sir,

Foreign Office, 24 August 1863.

WITH reference to your Despatch of the 9th ultimo, I transmit to your Excellency a copy of a letter from the India Office,† stating that as the question of division of messages by 0.43. 3 F † No. 54. the

App. No. 2.

the Bagdad telegraph has not been raised at Tehran, Sir C. Wood has no wish that any stipulation on the subject should be introduced into the Convention with Persia.

Sir C. Wood further points out the serious objections existing to the Porte's proposal that the Persian line should be made use of in the communications east of Bagdad, only when the more direct Turkish line is interrupted; and urges the necessity, in order to maintain the Persian line in a state of efficiency, that a certain amount of European messages should be sent by that route.

Her Majesty's Government trust that in consideration of these circumstances the Porte will not object to such use being made of both lines between Bagdad and Bushire as will best ensure the efficiency of telegraphic communication between Europe and India.

I am, &c.
(signed) Russell.

No. 62.

Mr. Layard to Mr. Melvill.

Sir,

Foreign Office, 25 August 1863.

I AM directed by Earl Russell to transmit to you herewith, for the information of Secretary Sir Charles Wood, copies of Despatches addressed by his Lordship to Sir H. Bulwer, Mr. Alison, and Mr. Thomson, on the subject of the Persian telegraph.*

* Nos. 59, 60, and
61.

I have, &c.
(signed) A. H. Layard.

No. 63.

Mr. Melvill to Mr. Layard.—(Received August 27.)

Sir,

India Office, 26 August 1863.

I AM directed to acknowledge the receipt of your letter of the 25th instant, and its enclosures, on the subject of the Persian telegraph, &c., which have been duly laid before the Secretary of State for India.

I have, &c.
(signed) J. Cosmo Melvill.

No. 64.

Mr. Melvill to Mr. Layard.—(Received August 28.)

Sir,

India Office, 27 August 1863.

I AM directed by the Secretary of State for India to acknowledge receipt of your letter of the 14th instant, inclosing a copy of the Porte's reply to the proposal that the Indian "through" telegraph messages, *via* Bagdad, should be divided between the Persian and the Turkish lines. In reply, and in continuation of my letter of the 13th instant, I am to make the following remarks:—

In the first place I have to observe that in execution of the arrangement with the Turkish Government, the whole of the stores for the direct line from Bagdad to Bussorah have already been purchased and dispatched by the Indian Government. A submarine cable has also been provided, at great cost, to extend from Bushire the whole distance westward to the mouth of the "Shat-el-Arab," and this expenditure will be useless if the line from Bagdad to that point be not constructed. It is therefore impossible that the Porte should now be allowed to withdraw from their undertaking to construct the line for which the materials have thus been provided.

But I am to add that Sir Charles Wood is convinced that the Turkish Government has taken a mistaken view of its own interest in this matter. These interests Sir Charles Wood believes to be identical with those of the Indian Government, and that it is for the common interest of both that this duplicate line, through Persia, should be constructed.

On an extended line of telegraph (such as that from England to India) the returns depend mainly on "through" communication, and such appears to be the opinion of the Turkish Government itself. Now it is evident that the result of an interruption on any part of the line must be a loss on the whole of the line of any receipt from these messages, the transmission of which is stopped by the partial break. A further result of such interruption would be that public confidence in the security of the line would be shaken, and the development of the traffic checked, even after the defect had been repaired. Recognizing the importance of this consideration, the Indian Government has throughout acted on the principle that every precaution should be taken to render as secure as possible each and every link of the important chain of communication between Constantinople and India. On this principle, although they have nearly completed the land line from Kurrachee to Guadur, they have resolved, in addition to completing this land line, to incur the further expense of extending the submarine cable from Guadur to Kurrachee; and it was on the same principle

ciple that they consented to afford aid to the Persian Government in constructing an alternative line between Bagdad and the Persian Gulf. There will thus be alternative lines between Kurrachee and Guadur, and between Bushire and Bagdad. If the land line through Mekran should be interrupted, messages may be sent by the submarine line; and in like manner if the line from Bushire to Bagdad should be interrupted, there will be the means of sending the message *viâ* Tehran; and if the latter line be interrupted, the messages can be sent *viâ* Bussorah.

During winter the maintenance of parts of the Persian line is likely to prove difficult and uncertain, while during August and September the same may probably be the case with the Bussorah route. It is, however, very improbable that both these lines will be interrupted at the same time. The transmission of messages by either one route or the other is thus rendered as secure as can be, and the certainty of the delivery of "through" messages, on which the employment of the line so much depends, will in a great measure be insured; and, as the pecuniary return from the line depends on the extent to which it is used, the certainty of transmission is really the means of ensuring large returns on the expenditure incurred.

At first sight it appears that, in the case of messages sent by the Persian line, both the Indian and the Turkish Governments are likely to lose part of the returns that might otherwise be looked for from their respective portions of the more direct line from Bagdad, *viâ* Bussorah, to Bushire; and, as the cost of the submarine cable is nearly 300 l. per mile, it may be remarked that the interests of the Indian Government in the returns from this direct line are quite as great, or indeed greater, than those of the Porte. The consideration of an alternative line, however, affords increased security to the "through" communications in a degree that has been deemed much more than sufficient to outweigh this consideration.

In short, therefore, the Turkish Government has the strongest interest in making the communication eastward of Bagdad as certain and free from interruption as possible. The length of line from Bagdad westward to the frontier of the Turkish dominions in Europe is so great, and the payment for the transmission of messages along that line is so large, in proportion to that due to the shorter portions from Bagdad to Bussorah, or from Bagdad to Khanakeen, that the certainty on these latter portions is of the greatest importance towards securing the receipts on the longer part of their line. Any difference between the payments for messages sent by the Bagdad and Bussorah line, and for those sent on the line between Bagdad and Khanakeen, is insignificant in comparison with the security afforded by these two concurrent lines for the transmission of messages all the way through Turkey in Asia and Turkey in Europe, and the receipts to be derived from it by the Turkish Government. Sir Charles Wood entertains no doubt but that when this view is put before them, the Turkish Government will no longer hesitate to perform their part of the engagement by completing the line between Bagdad and Bussorah.

I have, &c.
(signed) *J. Cosmo Melvill.*

No. 65.

Earl Russell to Sir H. Bulwer.

Sir,

Foreign Office, 8 September 1863.

WITH reference to your Excellency's Despatch of the 31st of July, and to my Despatch of the 24th ultimo, I transmit to you herewith a copy of a letter from the India Office,* * No. 66. stating the reasons why Sir Charles Wood considers it impossible that the Porte should be allowed to withdraw from its undertaking to construct the telegraph from Bagdad to Bussorah, and pointing out how the Turkish Government has taken a mistaken view of its own interests in this matter, which Sir Charles Wood believes to be identical with those of the Indian Government, and that it is for the common interest of both Governments that a duplicate line of telegraph to India, through Persia, should be constructed.

Her Majesty's Government trust that the Turkish Government will, on learning from your Excellency their views as set forth in the India Office letter, no longer hesitate to perform their part of the engagement of completing the line of telegraph between Bagdad and Bussorah.

I am, &c.
(signed) *Russell.*

No. 66.

Mr. Merivale to Mr. Hammond.—(Received September 11.)

Sir,

India Office, 11 September 1863.

IN continuation of former correspondence,† I am directed by Sir Charles Wood to acquaint you, for the information of Earl Russell, that Lieutenant J. N. Champain, R.E., † No. 64. has been appointed director of the operations about to be undertaken in Persia for the construction of land lines of telegraph in connection with the Persian Gulf cable.

App. No. 2.

Lieutenant Champain will leave England during the present week, and will pass through Tehran on his way to Bushire.

Sir Charles Wood requests that Earl Russell will cause Her Majesty's minister in Persia to be apprised of Lieutenant Champain's appointment.

I am, &c.
(signed) *Herman Merivale.*

No. 67.

Earl Russell to Mr. Alison.

Sir,

Foreign Office, 11 September 1863.

* No. 66.

I TRANSMIT for your information the accompanying copy of a letter from the India Office,* announcing the appointment of Lieutenant J. N. Champain, R.E., as director of the operations about to be undertaken in Persia for the construction of the land lines of telegraph in connection with the Persian Gulf cable.

I am, &c.
(signed) *Russell.*

No. 68.

Mr. Merivale to Mr. Hammond.—(Received September 12.)

Sir,

India Office, 11 September 1863.

IN continuation of Mr. Melvill's letter of 27th ultimo, relative to the proposed direct Turkish line of telegraph from Bagdad to the Persian Gulf, I am directed by Sir Charles Wood to request that Earl Russell will cause the following particulars regarding the steps taken here for aiding in the construction of that line, to be communicated to the Turkish Government.

It has already been intimated that stores and materials, including "compound" iron posts for the whole of this line, have been supplied by the Government of India. The first cargo of these stores may be expected at Bussorah during the present month; intimation has been made to Colonel Kemball of each successive shipment; detailed lists of the stores and descriptions of the posts have also been forwarded; and an inspector, who had previously been instructed in all details connected with the iron posts and other stores, left England for Bagdad, *via* Beyrout, on the 12th ultimo. This inspector has been instructed, on his arrival at Bagdad, to afford all information that may be required for effecting the proper distribution of the stores; and it is hoped that the line may thus be commenced before the end of October.

The total length of line from Bagdad to Fas, by the route selected by Colonel Kemball, is about 375 miles, and there is no doubt that this length of line can be readily completed before the end of January if a sufficient number of distinct working-parties are organised and set to work on different sections of the line.

With five such working parties, the average length for each will be only 75 miles; and, if efficient supervision can be secured for each party, and proper instruction afforded in the method of erecting the iron posts, the whole line should be completed with certainty within the period named. It is obviously of great importance both to the Turkish and Indian Governments, that this link in the chain of communication should be completed simultaneously with the more eastern or submarine portions—that is, before the end of January next. With a view, therefore, of affording all possible assistance, the following arrangements have been made:—

Five complete sets of tools, implements, and apparatus of every kind that can be required by a working party employed in the construction of a line with iron posts have been provided, and sent out with the other stores; one inspector and four non-commissioned officers of the Royal Engineers, who had previously been instructed in the erection of the posts, have been sent, *via* Bombay, to Bussora, where they may be expected to arrive about the end of October, the earliest time at which Europeans could be employed in Mesopotamia. The services of these men, as well as those of the inspector previously referred to, will be placed at the disposal of Colonel Kemball for employment with the different working parties, in such manner as may be most convenient to the Turkish officials. A telegraphic engineer, Mr. Greener, is also at Bagdad, and the whole of this staff will be made available, under Colonel Kemball's orders, to aid in the operations until the completion of the work.

The Government of India, by whom the whole of the staff above referred to will be paid, has made these arrangements with a view of promoting the early and effectual completion of this important line, but it is of course necessary that the approval of the Turkish Government should be given before the staff can be employed in the manner suggested. It is moreover very desirable, and Sir Charles Wood would suggest that the attention of Her Majesty's Ambassador at Constantinople should be especially drawn to this point, that this approval should be distinctly expressed to the Pasha of Bagdad, in order to insure the cordial co-operation of the Turkish officials.

I have, &c.
(signed) *Herman Merivale.*

No. 69.

App. No. 2.

Earl *Russell* to Sir *H. Bulwer*.

Sir,

Foreign Office, 15 September 1863.

WITH reference to my despatch of the 8th instant, I transmit herewith a copy of a further letter from the India Office,* reporting the steps taken for aiding in the construction of the proposed direct Turkish line of telegraph from Bagdad to the Persian Gulf, and I have to instruct your Excellency to communicate the particulars to the Turkish Government, pointing out to them that those arrangements have been made with the view of promoting the early and effectual completion of that important line of telegraph.

* No. 68.

As it is of course necessary that the approval of the Porte should be given before the staff can be employed in the manner suggested, I have to instruct your Excellency to endeavour to obtain such sanction with as little delay as possible, and to take especial care that the Pasha of Bagdad is distinctly informed that the Turkish Government have approved of the arrangements in question, in order to insure the cordial co-operation of the Turkish officials.

I am, &c.
(signed) *Russell*.

No. 70.

Earl *Russell* to Mr. *Alison*.

Sir,

Foreign Office, 23 September 1863.

WITH reference to my despatch of the 24th ultimo, respecting the disbursements to be made through you on account of the telegraph between Khanakeen and Bushire, I transmit for your information the accompanying copy of a despatch to the Government of Bombay upon that subject.

I am, &c.
(signed) *Russell*.

Enclosure in No. 70.

Sir. *C. Wood* to the Government of Bombay.

(Telegraphic)

16 September 1863.

1. WITH reference to my despatch of 25th June last, on the subject of disbursements to be made at Tehran, Bagdad and Bushire, on account of the telegraph in Persia, copies are herewith forwarded, for your Excellency's information, of the correspondence noted in the margin.†

† Nos. 53 and 58.

2. The disbursements in question will consist chiefly of salaries of sanctioned establishments, particulars of which were furnished by my despatches of 15th August and 16th instant; but some additional payments will have to be made on account of travelling and contingent expenses.

3. It will be observed from the enclosed correspondence that Mr. Alison, Her Majesty's Minister at Tehran, will look to your Government for specific information regarding his disbursements and the subsequent adjustment of accounts, and it will be necessary that similar information should be furnished by you to Colonel Kemball at Bagdad, and to Lieutenant Colonel Pelly at Bushire.

4. In the preparation of instructions to these several officers the suggestions contained in the enclosed letter from Colonel Stewart will no doubt be found useful.

No. 71.

Mr. *Merivale* to Mr. *Hammond*.—(Received September 29.)

Sir,

India Office, 28 September 1863.

WITH reference to the correspondence on the subject of the establishment of an alternative line of telegraph from Bagdad, *viâ* Khanakeen, through Persia to Bushire, I am directed by Sir Charles Wood to state that it appears to him to be desirable that the following proposals for the construction and working of that portion of the line which will run through Turkish territory, should be made to the Government of the Porte, viz. :—

That the materials required for the construction of the line shall be provided by the Indian Government under an arrangement similar to that under which stores for the Bagdad and Bussorah line have been supplied.

That the construction of the line shall be carried out by the Turkish Government, but the Indian Government will be prepared to render such assistance as may be required, by providing superintendence, and by making advances under a similar arrangement to that referred to in the preceding paragraph, to defray the cost of construction.

App. No. 2.

That having reference to the total length of the section of the line running through Turkish territory (97 miles) the expense of establishing a repeating station on the frontier be dispensed with; the line from Bagdad to the first Persian station (Kermanshah) being worked as a single direct electrical circuit; and—

That for all messages transmitted by the Persian line, the Turkish Government be credited with the proportion of tariff charge due to them for the section in the territory. But it appears to Sir Charles Wood, that in order to secure the efficiency of the whole line, it would be advantageous that the Turkish section, and the line in Persia, should be placed under the same general superintendence; and that to enable the English superintendent to make arrangements for the due despatch of messages, he should have control of that part of the office establishment at Bagdad which is employed in connection with the Persian branch line.

Sir Charles Wood accordingly requests that instructions may be issued to Her Majesty's Ambassador at Constantinople to enter into an arrangement with the Turkish Government on the basis of the above proposals.

I have, &c.
(signed) *Henry Merivale.*

No. 72.

Earl Russell to Sir H. Bulwer.

Sir,

Foreign Office, 29 September 1863.

WITH reference to my despatches, of the 8th and 15th instant, respecting the establishment of an alternate line of telegraph from Bagdad, *via* Khanakeen, through Persia, to Bushire, I transmit for your Excellency's information and guidance the accompanying copy of a letter from the India Office,* stating the proposals which Sir Charles Wood desires to have made to the Porte in regard to the construction and working of that portion of the line which will run through Turkish territory, and I have to instruct your Excellency to act in accordance with the wishes of the Secretary of State for India as therein explained.

I am, &c.
(signed) *Russell.*

No. 73.

Sir H. Bulwer to Earl Russell.—(Received October 24.)

My Lord,

Therapia, 15 October 1863.

IN pursuance of the instructions contained in your Lordship's despatches of the 24th of August, and 8th, 15th, and 29th of September last, I have addressed three notes to the Porte, urging it not to withdraw from the construction of a line of telegraph from Bagdad to Bussorah. I made use of all the arguments employed by the India Office to show that it is as much for the interest of the Turkish Government as it is for that of the British Government that a duplicate line of telegraph should be available to India, and after some hesitation the Porte has at length acquiesced in the views of Her Majesty's Government, and consented to avail itself of the staff of engineers provided by the Indian Government as set forth in the letters from the Indian Office of September 11 and 28th.

Aali Pasha has thought it advisable, however, to stipulate in writing the conditions on which the lines both to Bussorah and Khanakeen are to be undertaken. I have therefore, subject to your Lordship's approval, agreed to the draft protocol herewith enclosed, which appears to me to embody the principal arrangements contemplated by Sir Charles Wood.

The details, connected with the working of the lines, are left for consideration hereafter.

The payment of the materials furnished by Her Majesty's Government is made contingent upon the actual opening of the line for through traffic, by a provision that such payment shall be met out of the receipts of the lines; and this condition, under the circumstances, appeared to me so reasonable that I could offer no objection to its being inserted in the protocol.

Although it is stipulated in Article 9 that the traffic shall be equally divided between the two lines, I have, as authorised by Sir Charles Wood, informed the Porte that the Indian Government would not, without necessity, divert from the Bussorah line a greater amount of traffic than would suffice to keep the Persian offices in thorough working order.

It will, therefore, be open to the Indian Government to determine what amount of through traffic, beyond one-half, shall be transmitted by the Bussorah line. But it would, perhaps, simplify matters if an understanding were come to with the Porte that messages may be forwarded indifferently by either line, as happens to be most convenient, and that payment be calculated on the mean distance of 375 and 89 miles, the distance of Bagdad from Bussorah and Khanakeen, respectively.

I am

I am now awaiting your Lordship's instructions by telegraph as to whether the protocol is approved by Her Majesty's Government. When it has been signed, orders will be transmitted to Bagdad by telegraph to commence the works on the Bussorah line as soon after the arrival of the staff of engineers from India as may be practicable.

App. No 2.

I have, &c.
In the absence of Sir H. Bulwer,
(signed) *E. M. Erskine.*

Enclosure in No. 73.

DRAFT OF PROTOCOL.

[See Protocol, as signed 20 October 1863.—Enclosure in No. 75.]

No. 74.

Mr. *Hammond* to Mr. *Merivale*.

Sir,
Foreign Office, 24 October 1863.
WITH reference to my letter of the 6th instant, I am directed by Earl Russell to transmit to you for the consideration of Sir C. Wood, the accompanying copy of a despatch from Her Majesty's Ambassador at Constantinople,* enclosing a copy of the protocol which the Porte is anxious his Excellency should sign relative to the Bagdad and Bussorah Telegraph.

* No. 73.

I have, &c.
(signed) *E. Hammond.*

No. 75.

Sir *H. Bulwer* to Earl *Russell*.—(Received November 1.)

My Lord,

IN accordance with the instructions conveyed to me by your lordship's telegram of the 17th instant, I have this day signed a protocol with Aali Pasha, herewith enclosed, determining the conditions on which the Porte is prepared to construct and work a duplicate line of telegraph between Bagdad and Bussorah, and Bagdad and the Persian frontier, in connection with the submarine cable from India by the Persian Gulf.

As your lordship appears to me in doubt with respect to the exact tenor of the Convention of Brussels, referred to in Article 11 of this protocol, I think it better to transmit also a copy of that instrument. It was framed, as your lordship will perceive, mainly with the view of settling a uniform regulation and tariff for international telegraphic communications on the Continent; and as its provisions are already in force throughout the Turkish Empire, the Porte is desirous that they should, as far as may be practicable become the basis of any future arrangements with Her Majesty's Government in respect with the traffic in India.

The Persian minister is, I believe, instructed to negotiate a telegraphic convention with the Porte on somewhat similar terms, and your lordship may perhaps see fit to comprise Persia also in the arrangements to be adopted for working the different lines.

It is my intention to forward a copy of this protocol to Colonel Kemball by to-morrow's post, for his information and guidance.

I have, &c.
In the absence of Sir H. Bulwer,
(signed) *E. M. Erskine.*

Enclosure in No. 75.

PROTOCOL.

A LA suite d'un échange de notes qui a eu lieu entre l'Ambassade de Sa Majesté Britannique et le Ministre des Affaires Etrangères de Sa Majesté le Sultan, au sujet de la prolongation de la ligne aérienne de Bagdad jusqu'à Bussorah et Khanakain, dans le but de relier par deux lignes différentes les télégraphes Indiens au réseau télégraphique de l'Europe, l'Ambassadeur de la Reine de la Grande Bretagne près la Sublime Porte et le Ministre des Affaires Etrangères du Sultan, en vue d'assurer la réalisation de ces entreprises, ont arrêté l'arrangement suivant:—

App. No. 2

Article 1. Le Gouvernement Ottoman fera prolonger à ses frais:

1. La ligne de Bagdad à Bussorah.

2. Il construira une ligne aérienne de Bagdad jusqu'à Khanakain, sur la frontière Persane. Ces deux lignes seront à deux fils, dont l'un sera destiné au service exclusif des messages directs.

Art. 2. Le Gouvernement Indien portera, de son côté, à ses frais, le câble sousmarin Indien, aboutissant à Bushire, soit à Bussorah soit à un autre point quelconque de l'embouchure du Sehat-el-Arab, qui sera désigné plus tard, et qui sera relié à la ligne aérienne.

Art. 3. Le Gouvernement Indien fournira en outre au Gouvernement Ottoman tout les matériaux nécessaires, y compris les pôleaux en fer, pour la construction des deux lignes aériennes ci-dessus indiquées.

Les deux ingénieurs télégraphiques qui se trouvent déjà à Bagdad, ainsi que l'inspecteur et les quatre sous-officiers de génie Britannique qui sont attendus prochainement dans cette ville, seront mis à la disposition des autorités Ottomanes pour coopérer à la construction de ces lignes.

Art. 4. Le Gouvernement Ottoman payera les matériaux ainsi fournis par le Gouvernement Indien, sur la recette des messages télégraphiques Indiens, qui traverseront la ligne de l'extrême frontière Européenne de l'Empire Ottoman, soit jusqu'à Bussorah, soit jusqu'à Khanakain, d'après un arrangement spécial que les deux Gouvernements se réservent d'établir pour déterminer la mode et l'époque des versements du prix de ces matériaux.

La rétribution des ingénieurs reste à la charge du Gouvernement Indien.

Les matériaux qui sont fournis par le Gouvernement Indien seront consignés, à leur arrivée, entre les mains des autorités Ottomanes contre leur reçu.

Art. 5. Les autorités Impériales recevront l'ordre de faire commencer immédiatement les travaux de la ligne de Bagdad à Bussorah.

Art. 6. Le câble sousmarin qui doit se relier à la ligne aérienne de Bagdad à Bussorah devra être posé le plutôt possible, afin d'en assurer le fonctionnement simultané.

Art. 7. Aussitôt que cette ligne aura été achevée le Gouvernement Ottoman mettra la main à celle de Bagdad à Khanakain, pour laquelle le Gouvernement Indien s'engage à fournir également les matériaux et les ingénieurs aux mêmes conditions qui ont été stipulées pour la ligne de Bussorah.

Art. 8. La Sublime Porte aura soin, selon la nécessité, d'employer pour la service de ces lignes des personnes possédant la langue Anglaise.

Art. 9. Toutes les dépêches à destination ou provenant des Indes seront partagées à portion égale entre la ligne projetée de Bagdad à Bussorah d'une part, et celle de Khanakain d'autre part.

Pour éviter toute difficulté d'exécution, l'application du partage aura lieu de la manière suivante :

Toutes les dépêches provenant des Indes devront de passer par la ligne de Khanakain. Par contre, toutes celles à destination des Indes traverseront la ligne de Bagdad à Bussorah.

Art. 10. La stipulation de l'Article 9 sera en vigueur pendant dix ans, à l'expiration desquels il pourra être révisé moyennant une nouvelle entente entre les deux Gouvernements.

Art. 11. Les deux Gouvernements se réservent d'arrêter et de conclure une convention télégraphique sur les bases de l'Acte de Bruxelles, qui constitue la loi internationale des lignes électriques.

En foi de quoi, l'Ambassadeur de Sa Majesté Britannique et le Ministre des Affaires Etrangères de Sa Majesté Impériale le Sultan ont signé le présent protocol, en double expédition, et y ont apposé le sceau de leurs armes.

Fait à la Sublime Porte, le vingt du mois d'Octobre, de l'an mil huit cent soixante-trois.

Pour Sir Henry Bulwer,
(L.S.) *E. M. Erskine.*

(L.S.) *Aali.*

(Translation):

CONSEQUENT upon the exchange of notes which has taken place between the Embassy of Her Britannic Majesty and the Ministry of Foreign Affairs of His Majesty the Sultan, on the subject of the extension of the line above ground from Bagdad to Bussorah and to Khanakain, with the object of connecting, by two different lines, the Indian telegraphs with the telegraphic network of Europe, the Ambassador of Her Britannic Majesty at the Sublime Porte and the Minister of Foreign Affairs of the Sultan, with a view to this, have decided on the following arrangement:—

Article 1. The Ottoman Government will extend at its own expense:—

1. The line above ground from Bagdad to Bussorah.

2. It will construct a line above ground from Bagdad to Khanakeen on the Persian frontier. These two lines shall consist of two wires, of which the one shall be kept exclusively for direct messages.

Art. 2. The Indian Government, on its side, at its own cost, shall carry the Indian submarine

marine cable, which joins at Bushire, either to Bussorah or to some other point at the mouth of the Shat-el-Arab, which shall be designated later, and which shall be connected with the line above ground.

Art. 3. The Indian Government besides shall furnish to the Ottoman Government all the necessary materials, including the poles of iron for the construction of the two lines above ground before-mentioned.

The two telegraphic engineers who are already at Bagdad, as also the inspector and the four sub-officers of the British engineers which are soon expected to arrive in that city, shall be placed at the disposal of the Ottoman authorities to co-operate in the construction of these lines.

Art. 4. The Ottoman Government shall pay for the materials thus furnished by the Indian Government with the money received from the telegraphic messages from India, which shall traverse the line from the extreme European frontier of the Ottoman Empire, be it to Bussorah or as far as Khanakeen, according to a special arrangement, which the two governments reserve to themselves to establish, to determine the mode and the period of the payment of the price of these materials.

The salaries of the engineers to be paid by the Indian Government. The materials which shall be furnished by the Indian Government shall be consigned on their arrival to the hands of the Ottoman authorities, and a receipt given to them.

Art. 5. The Imperial authorities shall immediately receive orders to begin the works upon the line from Bagdad to Bussorah.

Art. 6. The submarine cable which is to meet the line above ground from Bagdad to Bussorah shall be laid as soon as possible, in order to secure simultaneous operations.

Art. 7. As soon as this line shall have been completed the Ottoman Government shall commence the line from Bagdad to Khanakeen, for which the Indian Government equally engages to furnish materials and engineers on the same conditions as those which have been stipulated for the line from Bussorah.

Art. 8. The Sublime Porte shall take care, if need be, to employ for the working of these lines, persons acquainted with the English language.

Art. 9. All the despatches addressed to or coming from India shall be equally divided between the line from Bagdad to Bussorah on the one hand, and that of Khanakeen on the other.

To avoid all difficulty of execution, the application of this system of division shall be as follows:

All despatches coming from India shall pass by the line from Khanakeen. On the other hand, all those from India shall be sent by the line from Bagdad to Bussorah.

Art. 10. The stipulation of Art. 9 shall remain in force for 10 years, at the end of which it can be revised by means of a new understanding between the two Governments.

Art. 11. The two Governments reserve to themselves the right to determine on and conclude a telegraphic convention on the bases of the Act of Brussels which constitutes the International Law of Lines of Electric Telegraphs.

In faith of which the Ambassador of Her Britannic Majesty and the Minister for Foreign Affairs of His Imperial Majesty the Sultan have signed the present Protocol in duplicate, and have annexed their seals.

Done at the Sublime Porte, the 20th day of October, 1863.

For Sir Henry Bulwer,
(L. s.) *E. M. Erskine.* (L. s.) *Aali.*

No. 76.

Mr. Baring to Mr. Hammond.—(Received 2 November.)

Sir,

India Office, 2 November 1863.

I AM directed by the Secretary of State for India to acknowledge the receipt of your letter of the 24th ultimo, with enclosure from Her Majesty's Ambassador at Constantinople, and in reply, to state that he is ready to assent to all the conditions of the Protocol respecting the Mesopotamian land lines of telegraph, which the Porte are desirous that his Excellency should sign.

Instead, however, of dividing the traffic, as stipulated in the Protocol, equally between the Bussorah and Khanakeen lines, Sir Charles Wood would prefer that, as suggested by Sir Henry Bulwer, messages left shall be forwarded indifferently by either line, as happened to be most convenient, and that payment should be calculated on the mean of 375 and 89 miles, the distances between Bagdad and Bussorah, and Bagdad and Khanakeen respectively. But if a change to this effect be made in the Protocol, it will be necessary, in order to ensure the maintenance of the Bussorah line, to provide that the mean rate of payment should continue in force only as long as both lines are kept in efficient working order.

It might, too, be perhaps desirable to modify the wording of that part of Article 3, which places the English engineers sent out to construct the lines at the disposal of the Turkish authorities, by providing that all communication from the latter to the former should be made through Colonel Kemball.

I have, &c.,
(signed) *T. G. Baring.*

App. No. 2.

No. 77.

Mr. *Alison* to Earl *Russell*.—(Received 3 November.)

My Lord,

Tehran, 5 October 1863.

I HAVE the honour to inform your Lordship that Mr. Man, with two other English engineers, who have been selected at the India Office to superintend the construction of portions of the Persian line of telegraph, arrived at Tehran on the 1st instant.

The wire and materials required for this line have not, so far as I am informed, yet reached the Persian Gulf, but I consider it advisable that no time should be lost in making such preparations as might be practicable in the absence of these stores, and I accordingly instructed Mr. Thompson to wait upon the Minister of Foreign Affairs, with the above gentlemen, in order to present them to his Excellency, and to arrange for commencing operations at once.

The Prince Itizad-oo-Sultaneh, under whose directions the Persian telegraph is to be constructed, was also present at the interview which Mr. Thomson had with Meerza Saeed Khan yesterday for this purpose, and his Royal Highness expressed it as his opinion, that it would not be expedient to begin erecting the posts until the insulators had been received, as it would be found very inconvenient, and perhaps impossible, to fix the insulators by means of ladders after the supports had been placed in the ground. He therefore considered that it would be on the whole better that the engineers who have just arrived should proceed to survey carefully the portions of the line allotted to them, in order to determine the exact route along which the wires should be laid down, and to satisfy themselves at the same time that the posts which had been prepared by the Persian Government were perfectly distributed along the road, and that they were sufficiently strong for the purpose required.

From the list of telegraph stores which have been forwarded to this country, it seems that the number of insulators sent out will only suffice for a comparatively small portion of the entire line, and unless this is speedily rectified, it may cause considerable delay hereafter in completing the work. Mr. Man, it is true, appears to think that insulators will scarcely be required in this climate, but until Lieutenant Champain reaches Tehran, which will probably be in the course of two or three weeks, no decision will be arrived at on this question.

In the meantime, ten Persian signallers are to be placed with the English superintendents, in order that they may receive daily instruction in the use of the telegraphic instruments, which are to be furnished for this line; though in signifying his readiness to adopt this measure the Itizad Sultaneh-oo pointed out the inconvenience which would eventually be felt from these instruments being intended for communicating in the English language only, instead of having also the Persian character, as is the case with those hitherto used by the Persian Government.

I have, &c.
(signed) *C. Alison*.

No. 78.

Mr. *Hammond* to Mr. *Merivale*.

Sir,

Foreign Office, 4 November 1863.

I AM directed by Earl Russell to transmit to you, to be laid before Secretary Sir C. Wood the accompanying copy of a Despatch from Her Majesty's Ambassador at Constantinople,* enclosing the Protocol signed on the 20th ultimo, relative to the Bagdad and Bussorah Telegraph.

I have, &c.
(signed) *E. Hammond*.

No. 79.

Earl *Russell* to Sir *H. Bulwer*.

Sir,

Foreign Office, 5 November 1863.

WITH reference to your Despatch of the 15th ultimo, I transmit herewith, for your Excellency's information, a copy of a letter from the India Office,† from which you will perceive that while Secretary Sir C. Wood concurs in the conditions laid down in the Protocol which you have signed relative to the Bussorah Telegraph, he makes certain suggestions which, he thinks, may be advantageously carried into effect, if practicable, in connection with that Protocol.

I have accordingly to instruct your Excellency to be guided by the wishes expressed in the India Office letter in this matter.

I am, &c.
(signed) *Russell*.

* No. 75.

† No. 76.

No. 80.

App. No. 23

Mr. *Alison* to Earl *Russell*.—(Received 9 November.)

(Extract.)

Tehrin, 5 October 1863.

IN the concluding paragraph of Mr. Cosmo Melvill's letter to Mr. Hammond, dated August the 13th, enclosed in your Lordship's Despatch to me of the 24th August, it is said, "as the European staff, and the stores for the telegraph in question, have been despatched, it appears to Sir Charles Wood to be of much importance that the Convention on the subject should be ratified without loss of time."

I am informed by Mr. Thomson that there has been no question of the formal conclusion of a convention respecting the telegraph, and that he had not himself taken any steps for that purpose. There are no precise instructions from your Lordship's office, nor are there any full powers for the conclusion of this instrument. A formal engagement has been entered into on the part of the Persian Government, for the construction of a line of telegraph from Khanakeen to Bushire, which has been agreed to by Her Majesty's Government, and which is deposited in the archives of this mission.

On bringing the proposal for entering into a convention before the Minister for Foreign Affairs, I was informed by his Excellency that the Shah's Government had never contemplated such a measure, and that the King did not see any necessity for it at present. I enclose copy of Mr. Thomson's report on this subject. Since that was drawn up, Mirza Saeed Khan has confirmed to me personally the views entertained by his Majesty.

The engagement with the Persian Government is equally valid for the purpose in contemplation, which both the King and his Ministers declare themselves most anxious to carry out without loss of time.

Enclosure in No. 80.

Mr. *Thomson* to Mr. *Alison*.

Sir,

Gulahek, 25 September 1863.

HAVING, in compliance with your instructions, prepared, under the form of a convention, in Persian and English, the necessary papers respecting the construction of the Persian telegraph, I yesterday waited upon the Minister for Foreign Affairs for the purpose of submitting them to him, with a view to their subsequent signature.

His Excellency appeared to be unprepared for the proposal thus made. He said that a formal convention of this nature had not been contemplated by the Shah's Government, and that he considered that the paper which he had already sealed and delivered to Her Majesty's Mission was sufficient to answer all the purposes required. That document was a formal engagement on the part of the Persian Government to construct the line of telegraph from Khanakeen to Bushire, under certain conditions, and the Persian Government was fully prepared to carry out all the stipulations therein set forth without loss of time; but no proposal having been made hitherto to draw up a treaty or convention on the subject, he was of opinion that the King would not now be disposed to make any change in the form of the agreement already made, which had been submitted to, and entirely approved of, by his Majesty before it was signed and transmitted to the mission. In order to prove that no convention was proposed at the outset, he said it would only be necessary to call attention to the concluding phrase in the engagement he had signed, wherein it was stated, that if the English Government approved of the terms offered, the Persian Government would at once commence the construction of the line, no mention being made of any intention on either side to conclude a convention on the subject.

His Excellency desired me to state to you, that in making the above remarks he had simply expressed his own private opinion, and that he would refrain from giving any official reply until he had ascertained what the Shah's wishes were on this question.

I have, &c.
(signed) *R. F. Thomson*.

No. 81.

Mr. *Alison* to Earl *Russell*.—(Received 21 November.)

My Lord,

Tehran, 19 October 1863.

MY attention having been drawn to certain inaccuracies in the translation of the Persian Agreement respecting the telegraph, which was forwarded to your Lordship by Mr. Eastwick in his despatch of the 19th of December, 1862, I have desired Mr. Thomson to make a correct translation of that document, which I now do myself the honour to enclose for your Lordship's information.

I have, &c.
(signed) *C. Alison*.

App. No. 2.

Enclosure in No. 81.

ENGAGEMENT entered into by the Persian Minister for Foreign Affairs for the Construction of a Line of Telegraph from Khanakeen to Bushire.

(Translation.)

1. THE Persian Government considers it necessary to construct a line of telegraph without delay from Khanakeen to the capital, Tehran, and from Tehran to the port of Bushire; and they agree that, whenever the English Government may require to communicate by the said telegraph, they are to be at liberty to do so through the Persian telegraph officers in the way they may desire, paying for the same at rates to be specified hereafter.

2. The Persian Government will assign a sum sufficient for the construction of this telegraph, and for the purchase of such materials as are not procurable in Persia, or can be better obtained in Europe.

3. The Persian Government engages to purchase from the English Government all the materials which are better procurable in Europe, and the English Government agrees to supply such materials at moderate prices.

4. In order that the said line of telegraph may be well constructed and officially worked, the Persian Government agrees to place it under the superintendence of an English engineer officer, who is to be paid by the English Government, and they further agree to fix a period during which instruction may be given and the line may be brought into good working order; and his Royal Highness the Itizad-oo-Sultaneh, the Minister of Public Instruction, and his Excellency the Amin-ed-Dowleh will have cognizance of the aforesaid officer's proceedings.

5. The said officer will be fully empowered to call upon the Persian authorities to supply any materials he may consider requisite for this work, and the Persian authorities will make no alteration in his requisitions unless it should be impossible to obtain the thing required. But a Persian officer will accompany him everywhere, so that he may be informed of what is done, and of the prices of the materials; and the accounts will be audited by the above-mentioned Prince and by the Amin-ed-Dowleh every three months, when a report will be drawn up and printed in the "Tehran Gazette."

6. In order to increase the friendship between the two Governments, and to promote the above undertaking, the English Government engages to purchase in England at reasonable rates, with the approval of the Persian Minister Plenipotentiary, the materials required for this work, and to convey them to the Persian frontier, and to receive from the Persian Government the price paid for the above articles by five instalments in five years after they are delivered on the frontier of Persia.

(In the handwriting of the Persian Minister for Foreign Affairs.)

THE Persian Government accepts this engagement. If the English Government desires it, the construction of the line of telegraph will be commenced in conformity with the above stipulation.

No. 82.

Mr. *Erskine* to Earl *Russell*.—(Received 21 November.)

My Lord,

Constantinople, 11 November 1863.

By a telegraphic despatch from Her Majesty's Consul General at Bagdad, dated the 7th instant, I learn that arrangements have been made with the Governor General for the commencement of the line of telegraph to Bussorah, and that three English and two Turkish engineers are already at work superintending the distribution of the materials along the line.

The staff expected from India had not then arrived at Bagdad.

I have, &c.
(signed) *E. M. Erskine*.

No. 83.

Mr. *Merivale* to Mr. *Hammond*.—(Received 2 December.)

Sir,

India Office, 2 December 1863.

I AM directed by Secretary Sir Charles Wood to state, for the information of Earl Russell, that all arrangements requisite in this country for extending the electric telegraph from Bagdad to India have now been completed, and that Lieutenant-Colonel P. Stewart has left England, to superintend, with the aid of Sir Charles Bright, the submersion of the submarine portions of the line, and to organize official establishments, and make other indispensable preparations for working it.

Before, however, a satisfactory system of working can be established, it is desirable that the

the assent of the Porte should be obtained to the direct participation by British officers in the service of the Turkish lines; and there are also several other points the settlement of which must probably become the subject of negotiation. Among these may be mentioned the periodical interchange of returns, the adjustment of tariffs, and of liability for loss or "mutilation" of messages, the distribution of traffic between concurrent lines, the mode of insuring the requisite priority of Government despatches, and the methods to be adopted for forwarding written despatches during the occurrence of interruption on any link of the line.

The usual European practice (and that to which in their recent despatches the Turkish Government refer) is to embody, in a formal Convention, all that may be mutually agreed on between the various administrations concerned; and if practicable it would, in Sir Charles Wood's opinion, be desirable to enter into such a detailed Convention both with Turkey and Persia before commencing to use the through line. It has, however, been represented to him that the changed conditions which apply to so extended a system of lines as that between India and Europe will necessitate very considerable alterations in the principles on which the Conventions now in force for the more limited system of telegraph in Europe have been based. At present it is impossible to foresee the exact nature of the alterations required; and the best plan would, therefore, seem to be to work the line experimentally for a short time, adopting, so far as they are applicable, the terms of the Brussels Convention, but postponing the formal introduction of alterations until some actual experience in the working of the extended line shall have supplied sufficient data for the preparation of such a Convention as shall be permanently applicable.

There are still other preliminaries, connected principally with the mode of accounting for and apportioning traffic receipts, which must be disposed of before even the experimental working can be commenced. On these and other points, which cannot be settled without the concurrence of the Turkish Government, Sir C. Wood has caused memoranda to be prepared which are herewith transmitted, and copies of which he requests may, if Earl Russell sees no objection, be forwarded to Her Majesty's Ambassador at Constantinople, with a view to his effecting a temporary agreement upon the basis therein laid down. If this be done, it will be necessary for the purposes of the agreement to station a traffic-manager at Constantinople on behalf of the Indian Government; and Sir C. Wood has selected for the office Mr. Walter Courtenay, who, as Secretary of the Submarine Telegraph Company, has become thoroughly conversant with all the details of telegraphic business, and has, moreover, had much experience in considering and maturing the terms of telegraph conventions. It is probable that Mr. Courtenay's presence at Constantinople might be very useful for the purpose of supplying information on technical points; and Sir Charles Wood will desire him to proceed at once to his post, and to place himself at the disposal of Her Majesty's Ambassador, if Earl Russell agrees with him in thinking the step advisable.

I have, &c.
(signed) *Herman Merivale.*

Enclosure in No. 83.

Memorandum.

PROPOSED Political Convention with Turkey for the Working of the Indo-European Telegraph, on the First Opening of the Through Line, and during the Period that must elapse before the Preparation of a more Detailed and Formal Convention.

ALL the terms of the Protocol recently signed at Constantinople to have effect, and the following, or some similar terms, to be added to that deed, or to be agreed to, in substance, by the Turkish Government:—

1. As regards that part of the office to be established on Turkish territory, at or near the mouth of the Shat-el-Arab, which is required for the service of the submarine line:—The British Government to provide and maintain, at its own cost, the whole of the signalling and other staff, as well as the instruments and stores required for working the submarine line, and the staff so employed to be solely under the orders of the British superintendent.

2. All "through" despatches received at this office through the Turkish land lines, to be transferred at once by the Turkish to the British superintendent, for transmission through the submarine, and *vice versâ*.

3. For the satisfactory preparation of returns and adjustment of accounts between the two Governments concerned, it is proposed that a traffic manager, paid by the British Government, be stationed at Constantinople, and another at Bagdad or Bussorâh, and such traffic managers at all times to have free access to the returns of through traffic in the Turkish office.

The accounts and money payments for transmission of through messages to be adjusted in accordance with the general terms of memorandum attached (Annex No. 1); and periodical settlement to take place at intervals not exceeding six months.

4. The tariff to be permanently adopted, for the transmission of through messages over the Turkish lines east of Constantinople, to be regulated hereafter on the basis of the Brussels Convention of 1858.

5. But for the period during which the line may be worked under this preliminary convention a higher rate to be charged.

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This, however, should not exceed—

20s. per message of 20 words between Constantinople and mouth of the Shat-el-Arab.

15s. ditto to Khanakeen.

14s. ditto to Bagdad.

6. The tariff to be permanently adopted on the submarine or other lines, the property of the Government of India, between the mouth of the Shat-el-Arab and Kurrachee, to be reconsidered hereafter in preparing the later Convention. But neither during the preliminary nor the subsequent period is the tariff on this portion of the line to exceed—

50s. per message of 20 words between Kurrachee and mouth of the Shat-el-Arab.

45s. ditto between Kurrachee and Bushire.

7. During the continuance of this preliminary Convention, the rules and regulations for the detailed working of the lines to be as nearly as practicable those of the Brussels Convention, at present adopted by the Porte in their relations with European telegraphic administrations.

But it appears to be the interest of both the Governments concerned that the following arrangements for the respective use of the two wires east of Constantinople should be agreed to (*vide* Annex No. 2). Also that an additional wire between Constantinople and Belgrade be provided by the Turkish Government, or that one of the existing wires be allotted exclusively to through traffic, on same general terms as "English" wire east of Constantinople.

15 November 1863.

(signed) P. Stewart.

No. 1. Accounts.—It is proposed, with regard to the settlement of accounts for messages from England to India, or any point east of Constantinople, that companies receiving or collecting such messages should, after retaining the proportion due to themselves, hand over to the continental administrations (with whom they are in the habit of settling accounts) the continental rates, as far as Constantinople only; and that the balance, or the charge from Constantinople to the destination, be handed over to the traffic manager appointed by the Government of India in London, it being the province of that officer to prepare the accounts with the Ottoman and Persian Governments, deducting periodically the whole or part of sums to be recovered from those Governments on account of stores advanced to them, and to credit to the Government of India the amount due on account of the submarine or Persian Gulf line, or on account of the Government lines within the frontier of India.

For this measure the assent of the Ottoman Government will be required; and, in the document communicating such assent, it should be distinctly set forth that, for all messages originating in England, the Porte will look to the India Office for the proportion due on account of Turkish lines east of Constantinople. Copy of such document would have to be sent by the Submarine Telegraph Company to the French, Belgian, Danish, and Hanoverian Administrations, and by the Electric and International Telegraph Company to the Dutch Administration.*

Each Company will have to furnish a periodical return of Indian messages for which they have received payment, and copies of these and similar returns must be interchanged periodically between the Government of India's traffic managers in London, Constantinople, and Kurrachee, with a view to affording a complete check on the returns for this, perhaps, the most important part of the through traffic passing towards India.

For messages originating in the continental offices, the amount due to each administration, as far as Constantinople, to be adjusted by successive transfers, just as at present. The Turkish Government will receive, in this manner, the gross amount of payment for such messages, minus the deduction made by western administrations. That Government will retain the whole amount due to her for the extent of line between her western frontier on the one hand, and Khanakeen or mouth of Shat-el-Arab on the other; and, according to the proposals now made, she will hand over to the traffic manager at Constantinople (appointed by the Government of India), the remaining balance, including whatever may be due to Persia, as well as the larger proportion due to the Government of India.

As regards messages originating in India, and transmitted towards Europe, it is proposed that the Indian Telegraph Department should account (to the traffic manager already appointed for Kurrachee) for the whole amount realised in India on account of such messages, minus the proportion due for lines east of Kurrachee, which proportion will, of course, be retained by the Indian Department. The traffic manager at Kurrachee, will divide the amount so received as follows:—

First.—Proportion due to Government of India for line from Kurrachee to Bushire or Bussorah to be retained.

Second.—Proportion due on account of Persian Government for messages transmitted *via* Teheran, to be credited to Persia, with periodical deductions on account of cost of stores supplied to that Government.

And Third.—The remaining balance, which will be credited to the Constantinople office, and paid through that office to the Turkish Government. The Turkish Government will thus receive the amount due (for such messages) to western administrations, as well as to herself, and will adjust the former amounts by transfer, under the system at present existing.

Under

* No possible objection on the part of these Administrations can be anticipated, as their interests are in no way whatever affected by the change.

Under the general arrangements thus proposed, the adjustment of accounts may be effected with great regularity, and the British Government will be enabled to recover with certainty the amounts advanced to Turkey and Persia.

App. No. 2.

No. 2.—Draft of some Clauses proposed to form part of subsequent Convention.

1. In the event of communication being interrupted upon the English line, the Porte to undertake that the Turkish line be given up for the through traffic until the English line is again in efficient working order.*

2. Should a contact at any time occur between the two wires,† so as to render it impossible to work both at the same time, or so as to cause delay to the Indian messages by attempting to do so, the Turkish wire to be insulated until the wires are freed from each other.

3. If a press of messages arise upon the English line, rendering delays unavoidable from their accumulation, the use of the Turkish line to be as much as an auxiliary means of transmission of the through traffic.‡

4. Should, at any time, a total break down of the English and Turkish lines occur, the terminal station on each side to dispatch a special messenger every four hours, with copies of all messages on hand, to the terminal station on the other side of the break down, such special messenger to travel at a speed of not less than miles an hour. As soon as telegraphic communication is restored, each station to ascertain the messages that have not, up to that time, been received by the other, and to transmit them according to priority. In such case, Clause 3 to come into especial operation.

5. In order to maintain the line in a thoroughly efficient state, line-men to be stationed upon its whole length, at a distance not exceeding miles apart.

6. Each line-man to be furnished with the necessary tools, spare insulators, wire, &c., and to examine his section of miles not less frequently than once every two days.

7. A head line-man to be placed over every line-men, and to ride over his section not less than once a-week, and to be held strictly responsible for its thorough order.

No. 84.

Mr. Hammond to Mr. Merivale.

Sir,

Foreign Office, 3 December 1863.

I AM directed by Earl Russell to acquaint you, for the information of Secretary Sir Charles Wood, that instructions will this day be sent to Her Majesty's Chargé d'Affaires at Constantinople respecting the telegraph to India, in accordance with the contents of your letter of yesterday's date; and I am to add that Lord Russell thinks it would be desirable that Mr. Courtenay should proceed at once to Constantinople, to assist Mr. Erskine in settling matters with the Porte.

I have, &c.
(signed) *E. Hammond.*

No. 85.

Earl Russell to Mr. Erskine.

Sir,

Foreign Office, 3 December 1863.

I TRANSMIT, for your information and guidance, the accompanying copy of a letter from the India Office,* reporting that all the arrangements requisite in this country for extending the electric telegraph from Bagdad to India have now been completed, and that steps will immediately be taken for completing the submarine portions of the line, and making other necessary preparations for working it; but that before any satisfactory system of working can be established, there are certain preliminary arrangements to be made, and points to be settled with the Turkish Government, the particulars of which are contained in the accompanying printed memorandum,† which has been prepared at the India Office; and I have to instruct you to endeavour to effect with the Turkish Government a temporary agreement upon the basis therein laid down. * No. 83.

I have informed the India Office that I consider it desirable that Mr. Courtenay, who has been selected for the office of traffic manager at Constantinople, should proceed there as soon as possible, in order to assist you in settling matters with the Porte. † Inclosure in No. 83.

I am, &c.
(signed) *Russell.*

* As the "through" traffic must always be much more important and remunerative than the "local" traffic it is clearly in the interest, both of the Turkish and British Governments, that this should be arranged.

† *Vide* above note.

‡ This point also affects the interests of both Governments alike.

App. No. 2.

No. 86.

Mr. *Alison* to Earl *Russell*.—(Received 5 December.)

My Lord,

Tehran, 3 November 1863.

CAPTAIN CHAMPAIN, director of the telegraph operations, arrived here on the 20th of October. On the same day a meeting was held at the Foreign Office, by the order of the king, of their Royal Highnesses Ferhad Mirza, the Itizad-oo-Sultaneh, their Excellencies Ferookh Khan, the Minister for Foreign Affairs, and myself, to decide whether the operations for fixing the posts, before the arrival of the wire and the insulators, as pressed by Mr. Man, should be proceeded with. It was decided in the affirmative, and Mr. Man will go to Ispahan in a day or two for that purpose.

The day after the return of the King, from an absence of a fortnight, I presented Captain Champain, Mr. Man and Mr. Walton to his Majesty, who expressed a lively interest in the work committed to their charge.

Captain Champain left for Bushire yesterday, and the necessary orders are being issued for affording every facility for the prompt execution of the operations along the different parts of the line.

I have, &c.
(signed) *C. Alison.*

No. 87.

Mr. *Erskine* to Earl *Russell*.—(Received 19 December.)

My Lord,

Constantinople, 7 December 1863.

I HAVE the honour to transmit to your Lordship herewith a translated copy of a telegraphic convention which has recently been concluded between the Sublime Porte and the Persian Government.

I have, &c.
(signed) *E. M. Erskine.*

Enclosure in No. 87.

TREATY between the Sublime Porte and the Shah of Persia for the Establishment of a Line of Telegraph.

Article I. LE Gouvernement Persan promet d'étendre une de ses lignes télégraphiques jusqu'à un endroit situé sur les frontières Ottomanes, et de son côté le Gouvernement Ottoman s'engage d'établir un embranchement d'un endroit quelconque de sa ligne télégraphique entre Scutari et Bagdad jusqu'à l'endroit où la ligne télégraphique Persane serait portée.

Article II. Il fut convenu entre les deux Parties Contractantes que l'endroit nommé Hankin sera fixé comme point de rencontre des deux lignes; cependant, si plus tard il y a nécessité de faciliter et d'élargir les communications télégraphiques, elles pourront être réunies également sur d'autres points des frontières.

Article III. Le Gouvernement Ottoman promet d'admettre et de faire passer sans difficulté les dépêches télégraphiques transmises du Royaume Persan ou bien d'un Etat qui est en communication télégraphique avec la Perse, en destination pour les Etats de Sa Majesté le Sultan, ou bien pour un Etat étranger qui est en communication télégraphique avec le Gouvernement Ottoman; et il est de même convenu que le Gouvernement Persan admettra et fera passer sans difficulté les dépêches télégraphiques transmises de la Turquie ou bien d'un Etat qui est en communication télégraphique avec le Gouvernement Ottoman, en destination pour la Perse ou pour un Etat étranger qui est en communication télégraphique avec le Gouvernement Persan.

Les dépêches télégraphiques de la Perse dans les Etats Ottomans, et les dépêches télégraphiques des Etats Ottomans en Perse, participeront aux mêmes avantages et obligations que les dépêches intérieures respectives ou bien celles d'un autre Etat étranger.

Article IV. Les deux Parties Contractantes s'engagent d'employer l'appareil Morse, employé actuellement en Europe, pour la transmission des dépêches télégraphiques qu'ils auront à échanger; et de même en ajoutant la Convention de Bruxelles à ce Traité, elles établissent qu'elles se conformeront en toutes choses aux clauses de la susdite Convention pour ce qui regarde la transmission des dépêches télégraphiques.

Article V. Les dépêches télégraphiques, qui seront échangées entre les deux Parties Contractantes, sont divisées en deux: 1, les dépêches Persanes et Ottomanes qui partent d'un des bureaux télégraphiques de l'un des susdits Gouvernements pour les Etats de autre; et 2, les dépêches des Gouvernements étrangers qui passent par les Etats de l'une des Parties Contractantes en destination pour l'étranger.

Article VI. La taxe à percevoir pour les dépêches de la première catégorie est fixée à 30 paras par *fersah*, ou bien à 20 paras par heure, en commençant de Hankin jusqu'à l'endroit

l'endroit de leur destination. La taxe ainsi calculée ne concerne que les dépêches qui contiennent 20 mots ou moins que cela, tant dans l'Empire Ottoman qu'en Perse; quant à celles qui contiennent plus de 20 mots, elles seront grevées de 10 piastres par chaque 10 mots ou même d'une fraction de 10 mots qu'elles contiennent.

Article VII. Les dépêches télégraphiques de la seconde catégorie seront taxées d'après la Convention de Bruxelles annexée au présent Traité, seulement lorsque celles-ci passent par les domaines Asiatiques du Sultan et par les lignes Persanes, elles y seront taxées d'après le mode ci-dessus mentionné; de sorte que la taxe des dépêches qui appartiennent à cette catégorie sera perçue dans le bureau établi à la frontière Persane en *sahib kerans* et en piastres, tandis que la taxe de ces dépêches dans les parties d'Europe jusqu'à l'endroit de leur destination sera perçue en francs, et ce mode de perception de taxes sera observé dans la transmission des dépêches télégraphiques des Etats Ottomans aux Indes Orientales.

Article VIII. Les dépêches télégraphiques partant de l'Europe par les lignes télégraphiques Ottomanes, en destination pour les pays Asiatiques situés au-delà des domaines Persans, et celles transmises de ces pays au Continent Européen, sont divisées en deux parties égales, dont l'une passera par les lignes de Hankin et de la Perse, et l'autre par Bagdad et Bussorah.

Article IX. La correspondance télégraphique entre les Etats Ottomans et ceux de la Perse sera faite en langue Turque, Persane, Française, et Anglaise.

Article X. Les employés du télégraphe, au service des deux Parties Contractantes, échangeront leurs comptes à la fin de chaque mois, et chaque semestre ils régleront définitivement leurs comptes d'après l'évaluation monétaire suivante:—

	<i>Piastres.</i>							<i>Paras.</i>	
Sahib Keran	-	-	-	-	-	-	-	5	0
Toman	-	-	-	-	-	-	-	50	0
Franc	-	-	-	-	-	-	-	4	14
Abas	-	-	-	-	-	-	-	1	0

Article XI. La présente Convention sera mise en exécution à l'expiration de quatre mois et plutôt si cela est possible, et elle sera en vigueur pendant dix ans depuis le jour de l'échange des ratifications.

Article XII. Cette Convention sera ratifiée par les deux Gouvernements et les ratifications seront échangées à Constantinople dans l'espace de trois mois depuis ce jour.

Constantinople, 17 Djemaziul-ahir, 1280 (le 28 Novembre 1863).

(Translation.)

Article I. THE Persian Government promises to extend one of its lines of telegraph to a spot situated on the Ottoman frontiers, and the Ottoman Government on its side engages to establish a branch from some point of its telegraphic line between Scutari and Bagdad to the spot where the Persian telegraphic line shall be carried.

Article II. It was agreed upon by the two contracting parties, that the place called Hankin should be fixed upon as the point where the two telegraphic lines should meet; however, if it should become necessary later to facilitate or increase the telegraphic communications they can still be made to meet on other points of the frontiers.

Article III. The Ottoman Government promises to allow the transmit without hindrance of telegraphic despatches transmitted from the Persian Empire or from a State which is in telegraphic communication with Persia, addressed to the States of His Majesty the Sultan, or to some foreign State which is in telegraphic communication with the Ottoman Government; and it is likewise agreed that the Persian Government will admit and transmit without hindrance telegraphic despatches transmitted from Turkey, or from a State which is in telegraphic communication with the Ottoman Government, addressed to Persia, or to some foreign State which is in telegraphic communication with the Persian Government.

The telegraphic despatches of Persia in the Ottoman States, and despatches of the Ottoman States in Persia, shall share the same advantages and obligations as their respective home despatches or those of another foreign State.

Article IV. The two contracting parties engage to employ the Morse apparatus, actually employed in Europe, for the transmission of the telegraphic despatches which they will have to transmit; and likewise, in joining the Convention of Brussels to this Treaty, they establish that they will conform in all things to the clauses of the aforesaid convention as regards the transmission of telegraphic despatches.

Article V. The telegraphic despatches, which shall be exchanged between the two contracting parties, are divided into two classes: 1, Persian and Ottoman despatches, which are sent from one of the telegraph offices of one of the afore-mentioned Governments addressed to the States of the other; and 2, the despatches of foreign governments which pass through the States of one of the contracting parties to a foreign destination.

Article VI. The charge for despatches of the first category is fixed at 30 paras a *fersah*, or 20 paras an hour, beginning from Hankin to their destination. This charge so calculated only affects despatches which contain 20 words or less than that, equally in the Ottoman Empire as in Persia; as to those containing more than 20 words, they will be charged 10 piastres for every 10 words or even fraction of 10 words which they consist of.

Article VII. Telegraphic despatches of the second category will be charged according to

App. No. 2.

the Convention of Brussels annexed to the present Treaty, only when they pass through the Asiatic dominions of the Sultan and by the Persian Lines, they will be charged in the aforesaid manner; so that the charge on despatches which belong to this category will be made at the office established on the Persian frontier in *sahib kerans* and in *piastres*, while the charge of these despatches in the parts of Europe to their destination shall be made in francs, and this system of charge shall be observed in the transmission of telegraphic despatches from the Ottoman dominions to the East Indies.

Article VIII. The telegraphic despatches leaving Europe by the Ottoman telegraph lines addressed to countries of Asia situated beyond the Persian dominions, and those transmitted from these countries to the European Continent, are divided into two equal parts, of which one shall pass by the lines of Hankin and Persia, and the other by Bagdad and Bussorah.

Article IX. The telegraphic correspondence between the Ottoman States and those of Persia shall be conducted in the Turkish, Persian, French, and English languages.

Article X. The telegraph officials in the employ of the two contracting parties shall verify their accounts at the end of every month, and every six months they will definitely settle their accounts according to the following rate of exchange:—

	<i>Piastres. Paras.</i>	
Sahib Keran	5	0
Toman	50	0
Franc	4	14
Abas	1	0

Article XI. The present Convention shall be put into operation at the end of four months, and sooner if it be possible, and it shall continue in force for ten years from the day of the exchange of ratifications.

Article XII. This Convention shall be ratified by the two Governments, and the ratifications shall be exchanged at Constantinople in the space of three months from this day.

Constantinople, 17 Djemaziul-ahir 1280 (28 November 1863).

No. 88.

Mr. *Erskine* to Earl *Russell*.—(Received 19 December.)

My Lord,

Constantinople, 9 December 1863.

IN accordance with the instruction contained in your Lordship's Despatch to Sir Henry Bulwer of the 5th ultimo, I have proposed to the Porte that messages should be left to be forwarded indifferently by either of the lines of telegraph which are being constructed between Bagdad and Bussorah and Bagdad and Khanakeen.

The Porte having consented to modify the arrangement already made, in the sense suggested by the India Office, I have, with the assent of Aali Pasha, drawn up an additional article to the Protocol of the 20th of October, embodying the proposal of a mean rate of payment for the two lines, which was signed by Aali Pasha and myself this day, and is transmitted to your Lordship herewith, in original.

As the Protocol was already executed when your Lordship's Despatch reached Constantinople, I have not thought it advisable to propose to the Porte any modification of Article 3; but I have informed Aali Pasha that all communications between the Turkish authorities and the British engineers who are to superintend the construction of the lines should be made through Her Majesty's Consul General at Bagdad, a course to which his Highness was quite ready to assent.

I have, &c.
(signed) *E. M. Erskine*.

No. 89.

Mr. *Erskine* to Earl *Russell*.—(Received 19 December.)

Constantinople, 10 December 1863.

I HAVE the honour to transmit herewith a copy of a Despatch from Colonel Kemball, Her Majesty's Consul General at Bagdad, reporting on the present condition of the works for the intended line of telegraph to Bussorah.

I have, &c.
(signed) *E. M. Erskine*.

Enclosure in No. 89.

Consul General *Kemball* to Sir *H. Bulwer*.

Sir,

Bagdad, 18 November 1863.

I HAD the honour to receive yesterday the Honourable Mr. Erskine's Despatch of 20th ultimo, transmitting copy of the Protocol relating to the construction and working of the proposed lines of telegraph from Bagdad to Bussorah and Khanakeen.

By my telegram, dated 7th instant, your Excellency will have learnt that, in anticipation of the orders now received, arrangements had been concluded between his Excellency Namik Pasha and myself, for undertaking immediately the works on the Bussorah line. Accordingly the supplementary distribution of materials has been effected at different points along the first section to Billeh, and its construction has been commenced by Mr. Inspector of Telegraphs, Joyce Perceval, Indian Service, with whom is associated Yuz-Bashee Omer Feizee Effendi. Mr. Carthew is engaged in carrying the wires across this river and beyond the limits of the town, which particular duty will be entrusted to him to all the stations where masts or wooden poles must of necessity be substituted for iron; and it is my intention presently to depute my telegraph assistant, Mr. Greener, at Bussorah, to meet the non-commissioned officer, Royal Engineers, who may be expected to arrive there about the 25th instant, and to superintend the construction of the sections north and south of that place. In the meantime the distribution of stores at the intermediate stations between Medineh and Hilleh will, I hope, be effected; and so soon as the working parties are ready at either end to undertake the intervening sections, where alone any serious difficulties may be apprehended, I propose myself to proceed to that quarter, accompanied by Samee Effendi, the officer appointed to the charge of the Turkish Department.

With the exception of a small remnant daily expected from Bussorah per steamer, the materials assigned for the use of the Persian line have been deposited at Khanakeen, and those required for the construction of the Bagdad Khanakeen section are already stored at Bagdad.

I have, &c.

(signed) *A. R. Kemball*.

No. 90.

Mr. *Hammond* to Mr. *Merivale*.

Sir,

Foreign Office, 22 December 1863.

WITH reference to your letter of the 2d of November last, on the subject of the Bagdad and Bussorah telegraph, I am directed by Earl Russell to transmit to you, to be laid before Secretary Sir Charles Wood, the accompanying copy of a Despatch from Her Majesty's Chargé d'Affaires at Constantinople,* enclosing an additional article to the Protocol of the 20th of October, signed by Aali Pasha and himself, embodying the suggestions contained in your before-mentioned letter. * No. 88.

I am, &c.

(signed) *E. Hammond*.

No. 91.

Mr. *Hammond* to Mr. *Merivale*.

Sir,

Foreign Office, 22 December 1863.

I AM directed by Earl Russell to transmit to you, for the information of Sir Charles Wood, the accompanying copy of a Despatch and of its enclosure, from Her Majesty's Chargé d'Affaires at Constantinople,† containing information respecting the Bagdad and Bussorah telegraph. † No. 89.

I am, &c.

(signed) *E. Hammond*.

No. 92.

Mr. *Hammond* to Mr. *Merivale*.

Sir,

Foreign Office, 24 December 1863.

I AM directed by Earl Russell to transmit to you, for the information of Secretary Sir Charles Wood, a copy of a Despatch from Her Majesty's Chargé d'Affaires, at Constantinople,‡ enclosing a translation of a telegraphic convention between Turkey and Persia. ‡ No. 87.

I am, &c.

(signed) *E. Hammond*.

App. No. 2.

— No. 4. —

CORRESPONDENCE relative to the FALSIFICATION of OPIUM MESSAGES.

(Home Department.—Electric Telegraph. No. 5 of 1861.)

To the Right Honourable Sir *Charles Wood*, Bart., G. C. B., Secretary of State for India.

Sir,

WITH reference to your despatch, No. 4, dated the 23d of March, we have the honour to transmit for your information a copy of the papers noted on the margin, relative to the falsification of opium messages despatched from Galle to Bombay, and also to an attempt to bribe signallers at the Sattara office. A further report on the latter case and on other similar cases has been promised by the Director General in his letter of the 5th instant.

To Officiating Director General, No. 181, dated 24th January 1861.
To Government of Bombay, No. 194, dated 24th January.
Telegram from Captain Murray, dated 26th January.
To Officiating Director General, No. 185, dated 28th January.
Telegram to Chief Secretary Bombay, dated 28th January.
To Officiating Director General, No. 415, dated 2d March.
From ditto, No. 9131, dated 16th March.

From Government of Bombay, No. 496, dated 19th April, with the following Enclosures, viz.:

1. Report by Captain Murray, No. 66, dated 6th February 1861.
2. Memorial of a Committee appointed at a Public Meeting at Bombay.
From Officiating Director General of Telegraphs, No. 410, dated 5th June.

2. As regards the general question for the improvement of the Department, the suggestions made by the Government of Bombay for that object, as well as for the amendment of the law in respect of the punishment of those concerned in falsifying, divulging, or tampering with messages, will be taken into consideration, in connection with the separate report referred to by Colonel Douglas at the conclusion of the letter now transmitted.

Fort William,
14 June 1861.

We have, &c.
(signed) *Canning.*
H. Rose.
H. B. W. Frene.
R. Napier.

From *W. Grey*, Esq., Secretary to the Government of India, to Major *C. Douglas*, Officiating Director General of Telegraphs in India (No. 181); dated 24th January 1861.

THE attention of the President in Council has been drawn to the statements made in the "Bombay Times" and "Standard" of the 10th, 12th, and 15th instant, copies of which are forwarded herewith, relative to the alleged falsifications of opium advices from China, transmitted by the telegraph from Galle.

2. The President in Council does not doubt that you have already instituted an inquiry into the matter, and he desires me to signify his expectation that it will be a searching and thorough one. You are requested to report the result to Government, taking in the meantime what steps you may think proper to punish the guilty parties, if they are discovered. The Bombay Government has been requested to afford every assistance in its power to the officers of the Telegraph Department in prosecuting their inquiries.

From *W. Grey*, Esq., Secretary to the Government of India, to the Secretary to the Government of Bombay (No. 194); dated 24th January 1861.

* No. 181.

I AM directed by the President in Council to forward the accompanying copy of a letter* this day addressed to the Officiating Director General of Telegraphs, directing him to institute a searching inquiry into the statements made in the "Bombay Times" and "Standard," of the 10th, 12th, and 15th instant, relative to the alleged falsification of opium advices from China to Bombay, *via* Galle, and to request that the Government of Bombay will direct its officers to co-operate with the Electric Telegraph Department, and to give every assistance in their power towards the detection of the guilty parties.

TELEGRAM from Captain *Murray*, Superintendent of Electric Telegraph, Western Circle, to the Secretary to the Government of India; dated 26th January 1861.

As copies of messages are by order of the Director General sent only to Calcutta, up to present date I have not been able to take any steps regarding falsification of opium messages, not having any clue as to where the alterations were made. On 15th instant, a second falsification occurred between Belgaum and Bombay; the line was cut between Sattara and Poona; and two native merchants taken into custody at Sattara for bribery. The case is now in the hands of the civil authorities and police. On 18th, I sent detailed report to the Director General.

App. No. 2.

From *W. Grey*, Esq., Secretary to the Government of India, to Major *C. Douglas*, Officiating Director General of Electric Telegraphs (No. 185); dated 28th January 1861.

I AM directed by the President in Council to forward to you the accompanying copy of a message* received from the Superintendent of Telegraphs, Western Division, in reply to a telegram from me of the 25th, regarding the recent falsification of opium messages between Galle and Bombay, and to request that you will call upon Captain Murray to explain the neglect with which he seems to have treated a matter so deeply affecting the character of the department, and especially why he did not communicate with you, as the head of the department, immediately he obtained information of these fraudulent transactions.

* Dated 26th instant.

TELEGRAM from the Secretary to the Government of India, to the Chief Secretary to the Government of Bombay; dated 28th January.

I AM to request that the police may be directed to exert themselves to the utmost in co-operation with the telegraph officers in tracing and bringing to punishment the parties concerned in the recent falsification of opium messages.

From Lord *H. Ulick Browne*, Under Secretary to the Government of India, to Major *C. Douglas*, Officiating Director General of Telegraphs in India (No. 415); 2 March 1861.

I AM directed to call attention to this office letter, No. 185, dated the 28th January last, and to request that Captain Murray's explanation of the neglect with which he treated the matter of the recent falsification of opium messages between Galle and Bombay may be submitted without delay.

From Major *C. Douglas*, Officiating Director General of Telegraphs in India, to Lord *H. Ulick Browne*, Under Secretary, Government of India (No. 9131), dated the 16th March 1861.

IN reply to your No. 415, dated the 2nd March, and in reference to Home Secretary's No. 185, of the 28th January, requesting me to call upon Captain Murray, Superintendent of Telegraphs in Western Division, to "explain the neglect with which he seems to have treated a matter (falsification of opium messages) so deeply affecting the character of this Department, and especially why he did not communicate with me immediately he obtained information of the fraudulent transactions," I have the honour to state that although Captain Murray, while replying to Mr. Grey's telegram, merely mentioned his having reported the circumstance to me officially on the 18th of the month, he had on the 8th idem communicated with me privately on the subject. Under these circumstances, it appears to me that the imputation of treating the matter with neglect seems to be removed, and the necessity of explanation from Captain Murray no longer exists.

2. A report of the circumstances connected with the fraud will be submitted to Government as soon as the result of the trial of Peetall and Allen, now pending at Bombay, becomes known.

From *W. Grey*, Esq., Secretary to the Government of India, to the Director General of Electric Telegraphs (No. 829); dated 29th April 1861.

IN continuation of the correspondence noted on the margin, I am directed to forward to you, in original, the accompanying letter, and its enclosures, from the Government of Bombay (No. 496, dated the 19th instant), and I am desired to express the hope of the Governor General in Council, that a full and clear report of all the circumstances connected with the recent occurrences at Bombay, may shortly be submitted, as promised in your letter of the 16th ultimo. The case has attracted the attention of the Secretary of State, and the Governor General in Council will be glad to be able to forward your report to England at an early date.

To Director General, No. 181, dated 24th January.
Ditto, No. 185, dated 28th January.
From ditto, No. 9131, dated 16th March.

2. In the present letter from the Bombay Government, you will observe that some suggestions are made for the improvement of the Department. These you are requested, after careful consideration, to report upon, and the report should, if possible, be submitted at the same time as your report upon the Bombay frauds. It will be convenient, however, that it should form the subject of a separate letter.

3. The return of the original enclosures is requested.

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From Lieutenant Colonel C. Douglas, Officiating Director General of Telegraphs in India, to W. Grey, Esq., Secretary to the Government of India, (No 410); dated 5th June 1861.

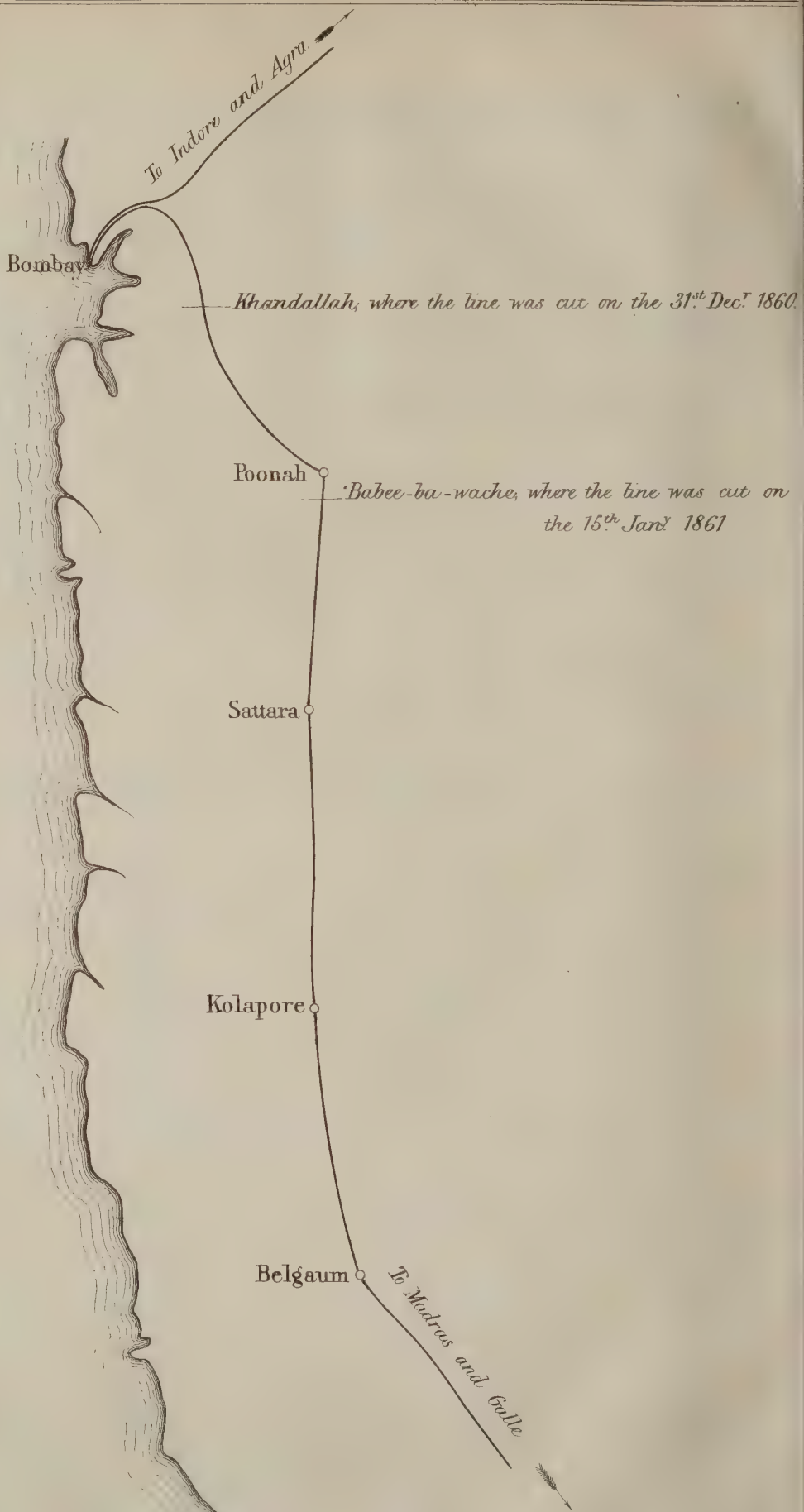
IN continuation of my No. 9131, of the 16th March, and in reply to your No. 829, of the 29th ultimo, wherein the Governor General in Council expressed a hope that a full report of all the circumstances connected with the recent falsifications of messages at Bombay might be shortly submitted, I have the honour to report as follows:—

2. At 8 h. 45 m. a. m., of the 31st of last December, the steamer "Pekin," from China, arrived at Galle, bringing the usual public commercial intelligence, and numerous private despatches, for transmission by telegraph to merchants in Bombay, regarding the price of opium at the date steamer left Hong Kong. The commercial news, by a rule of the Department taking precedence of all other messages, was first transmitted, and reached Bombay at 12 h. 45 m. of the same day, and was published for the information of the public. The private messages followed in due course, and were received by the various merchants to whom they were addressed.

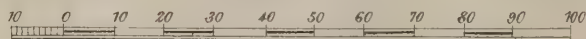
3. In consequence of the press of work on our lines, usual on the arrival of mail steamers, some of these private messages did not reach Bombay till the following day, and in all such there was a great discrepancy in the quotations of Opium, as compared with the messages of the previous day, and it was evident that the messages of the one or other of these days had been falsified. The extent to which this falsification was carried out, and its nature will perhaps be more clearly understood from the following table, giving extracts from the Opium quotations in the original messages.

Description of Messages.	Correct.		Falsified.	
	Rates of Opium as Telegraphed from Galle.		Rates of Opium as received in Bombay.	
Public news -	Malwa - - - - -	675	Malwa - - - - -	645
	Patna - - - - -	895 to 900	Patna - - - - -	845
	Benares - - - - -	895	Benares omitted.	
Private, No. 1 -	Benares - - - - -	800	Benares - - - - -	750
	Malwa - - - - -	580	Malwa - - - - -	550
Private, No. 2 -	Benares - - - - -	800	Benares - - - - -	750
	Market firm - - - - -	-	Market dull.	
	Malwa - - - - -	580	Malwa omitted.	
Private, No. 3 -	Benares - - - - -	900	Benares - - - - -	850
	Malwa - - - - -	680	Malwa - - - - -	650
	Market firm - - - - -	-	Market dull.	
Private, No. 4 -	Malwa - - - - -	675	Malwa - - - - -	645
	Patna - - - - -	900	Patna - - - - -	850
Private, No. 5 -	Hong Kong, 15th December -	900	Hong Kong, 15th December -	856
Private, No. 6 -	Patna, 250 more double -	125	Patna, 200 more double -	100
Private, No. 7 -	Malwa - - - - -	525	Malwa - - - - -	495
	Patna - - - - -	640	Patna - - - - -	590
Private, No. 8 -	Malwa - - - - -	150	Malwa - - - - -	120
	Patna - - - - -	275	Patna - - - - -	205
Private, No. 9 -	Malwa - - - - -	675	Malwa - - - - -	645
	Benares - - - - -	900	Benares - - - - -	840

4. The intention of the instigators of this fraud was evidently to lower the value of the drug in the Bombay market, as it will be observed, that in every instance, with two exceptions in the quotations regarding Malwa, and with but one exception in those regarding Benares and Patna, the value of the drug was, in the former case, lowered by 30 dollars, and that of the two latter by 50 dollars per chest, while in every instance where the state of the market has been given "Firm," it has been changed to "Dull." I must here remark that the original of every message transmitted, as well as the copies of such, taken *en route* at repeating stations, are forwarded to the complaint office in Calcutta, where the progress of every message can be traced, the time of its receipt into, and despatch from, every office is known, as also the name of the despatching and receiving signallers.



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The position of the offices between Belgaum and Bombay is given in the annexed sketch map.

5. Immediately on receipt of these messages in Calcutta from the various offices, they were examined, and the result showed that no error or falsification had occurred as far as Belgaum. This station was, at the time, working direct with Bombay, to which the messages were signalled, and in the copies in the Bombay office only did the falsification appear. It then seemed almost certain that either the transmitting signaller at Belgaum, or the receiving signaller at Bombay, was guilty of making these falsifications, though it was certainly possible that the perversion might have been effected by the signallers at any of the intermediate stations of Kolapore, Sattara, or Poonab, but still it was not probable, as such an arrangement could scarcely have been carried out without the complicity of the assistant in charge, and the whole establishment of signallers on duty, as it would have necessitated the repeating of each message at the station where it was desired to falsify them, instead of allowing them to pass through without repetition in the usual manner, each intermediate office being, as it were, simply a portion of the main line. While this examination, however, was in progress in Calcutta, the solution of the question was arrived at in Bombay, in the following manner.

6. An interruption to telegraph communication occurred between that station and Poona on the 3rd January, and on the inspector passing down the line in view to ascertain the cause, he discovered that it had been cut, and the ends rejoined by a piece of copper wire. The interruption had been caused by one of the fastenings of the copper wire (which had been imperfectly connected with the main line) slipping off.

7. It was now apparent that the falsification of messages, which occurred on the 31st December, had been effected by some person or persons intimately acquainted with our code of signals, and with the names of the signallers at Belgaum and Bombay, who had cut the line at the place discovered, inserted an instrument, and received the messages from Belgaum in the name of a signaller at Bombay, and transmitted them (falsified) to Bombay in the name of a signaller at Belgaum. It appears that the opium speculators implicated in this business at Bombay must have become possessed of the correct quotations of opium previous to the receipt of the public news message; for (and as if in impatience of the delay in the arrival of the public news message which they knew would be falsified), they caused a forged message to be posted outside the receiving office in the fort in a verandah convenient to that and other public offices, but at some little distance from the place on which these reports are always exhibited, and bearing the signature of the assistant in charge of the Bombay telegraph office, which had been cut from an old notice reporting the arrival of the English mail steamer "Nubia" at Madras. This forged message conveyed the same intelligence as the falsified public news message subsequently received, and was discovered by one of the clerks of the receiving office shortly after it had been posted, and was removed. It does not appear that any notice was issued from the Bombay telegraph office warning the public against accepting the correctness of the public news message, the receipt of which had been anticipated by a palpable forgery, nor is it shown how the parties who caused the fictitious message to be posted up outside the receiving office became acquainted with the intelligence before the receipt of the public news message, but it is clear that it must have been effected through the agency of the telegraph. All private messages received into the Bombay office prior to the arrival of the public news message have been examined, but none have been discovered which it is considered could have conveyed the particulars of the coming public news message either openly or by a concealed meaning. It is, therefore, supposed that the railway telegraph must have been employed for this purpose. This supposition is strengthened by the fact that there is a railway station at Khandalia, near to the place where the line is cut.

8. Application should have been made for permission to search the records of the railway company's office in view to ascertain if any such message had been sent. For although the transmission of private telegrams is in contravention of the terms of their license, I have already pointed out to Government in my No. 9036 of 11th March, that the license is constantly infringed by the railway company on this side of India, and as the practice was with some difficulty put a stop to in the case of G. I. P. Railway Company at Bombay, it is not improbable that this company's telegraph may have been the means of transmitting the private message in question.

9. As soon as it became known that the line had been cut, the police were put on the alert, and every effort was made to discover the guilty party, but without any result.

10. Having disposed of the falsification of the 31st December, we now come to the consideration of those of the 15th January, as it has been shown that the inquiry thus far had merely proved the fact of falsification. On the 15th January, the steamer "Ottawa" arrived at Galle from China, bringing messages for transmission as on the last occasion of the arrival of the "Pekin." These messages were duly transmitted, and after the receipt of the public news message at 13 hours 45 minutes on the 15th, and four private messages, an interruption occurred between Poonah and Sattarah, thus stopping the receipt of any other message for that day. Communication was restored the following morning, the 16th, at 7-30, and Bombay was placed in communication with Bellary, and the messages of the previous evening were repeated, when it was discovered

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that the quotations had been again falsified. The following Table will show the particulars of the quotations in those messages :—

Description of Messages.	Correct Rate.		Falsified Rate.	
	As Transmitted from Galle.		As Received in the Bombay Office.	
Public News -	New Patna -	900 dollars	New Patna -	880 dollars.
	New Benares -	900	New Benares -	880
	Malwa -	665	Malwa -	652
	Patna -	680 taels, nominal	Patna -	670 taels, nominal
	Malwa -	580 " "	Malwa -	514 " "
Private, No. 1 -	Patna -	901	Patna -	881
	Benares -	901	Benares -	881
	Malwa -	65	Malwa -	52
	Patna -	75	Patna -	70
	Malwa -	10	Malwa -	6
Private, No. 2 -	Patna -	277	Patna -	257
	Malwa -	150	Malwa -	137
	Bills -	222	Bills -	225
Private, No. 3 -	Patna -	277	Patna -	20 lower
	Malwa -	5 lower	Malwa -	15 "
Private, No. 4 -	-	-	Patna -	880
	-	-	Malwa -	652
	-	-	Market dull.	

11. The latter message was not transmitted from Galle, and appears nowhere but in the Bombay Office, and it would seem, therefore, to have originated at the place where the line was cut, and to have been the one on which the speculators operated. It will be observed that it gives the exact quotation of the falsified commercial news, and this, by a preconcerted arrangement, could easily be understood. The circumstances under which these falsifications occurred were identical with those of the 31st December. The messages were all correctly received as far as Belgaum, and transmitted from that station direct to Bombay, where the fraud first made its appearance. On the morning of the 6th, after communication had been restored, and the falsifications had become evident, it was reported by telegraph by Inspector Miller from Poonah, who had just returned after restoring communication, which had been interrupted since the previous evening, that on arriving at the place of interruption, situated on a hill about four miles from Poonah, he found the wire cut, and battery materials, consisting of salt, sulphate of copper, broken glasses, strewn about the ground. He also picked up several pieces of paper containing scraps of messages; on one piece was written, "When the price of Patna is above 890, we should lower 50 rupees, and take Maneek Chaund's name. Should the price be less than 890, we should higher 50, and take Tarra Chaund's name." He reported these circumstances to the deputy magistrate at Poonah, and on making inquiries in the village, he ascertained that two Europeans had been encamped on the spot, whom he traced to the Poonah Railway station. The papers alluded to, which were found by Inspector Miller in a very dirty state, were forwarded to Mr. Wickham, the deputy superintendent, who, after cleaning and washing them, discovered the name of G. Pectall. This lad had but five days previously been dismissed the Government Telegraph Department for refusing to proceed to a distant out-station; and on the occasion of the first falsification, on the 31st December, he had been absent without leave from the 25th December to the 2d January; and doubtless during this period he had contrived to remove undetected a spare instrument from the Bombay Office, by means of which the falsification was effected.

12. On comparing the writing on these papers with that of Pectall's in the office records, they were found to be identical.

13. Mr. Wickham then proceeded towards Poonah. On reaching Compoolie Railway station, he learnt that Pectall had been formerly employed in the railway company's telegraph, and had endeavoured to borrow an instrument from the Compoolie office about the 26th December, but did not succeed. On reaching Poonah, Mr. Wickham succeeded in tracing the Europeans who had encamped at the place where the line was cut, to the house of a Goanese, who stated that two sahibs slept at his coffee shed; that they left for two days, when they returned, and again slept there. He did not know who they were, but from his description Mr. Wickham recognised one as being the lad Pectall. The Goanese further stated that the sahibs employed coolies to carry their baggage from his house.

14. Mr. Wickham then proceeded to the railway station in search of these coolies, and while in conversation with the head signaller at the railway office, he learnt that Pectall and another person, not known to him, had been there on the evening of the 13th.

15. After

15. After some little difficulty, two coolies were found who accompanied the Europeans from the house of the Goanese. One of these men stated that he and four other coolies accompanied the two Europeans to a village called Babee-ba-Wachee, the place where the line was cut, about four miles off, carrying with them a tent, a box, and a basket; that they pitched the tent, cut the telegraph line, and connected it with a machine which the sahibs "constructed." That they remained there part of that day and the whole of that night, as also the next day and night, and that they left on the day following; also, that they told the coolies that they were employed by the Government in repairing the line.

16. With this evidence Mr. Wickham called upon Mr. Forgett, the deputy commissioner of police in Bombay, and by his assistance Pectall's appearance was obtained. He was instantly recognised by the Goanese and the coolies as one of the persons who had slept at the coffee-house, and had encamped and cut the line at Babee-ba-Wachee. Pectall then said that he had been to the place in question, and that he was accompanied by a person named Allen, who it appears was dismissed from this department in 1857. This person, Allen, was in like manner recognised by the Goanese and the coolies as the person who had accompanied Pectall. They were then handed over to the police, and while in custody Pectall confessed to one of the European constables that they had been bribed by a native to cut the line and falsify the messages. They accompanied the constable to a house, and pointed out a man named Ram Chund Kem Chund as the person who had bribed them. This person was arrested, but released the following morning as there was not sufficient evidence to proceed with the case.

17. Pectall and Allen were subsequently brought to trial at the last criminal session, for cutting the telegraph line and falsifying the messages *en route*, found guilty, and sentenced to imprisonment with hard labour for 18 months.

18. The case was entrusted to the Government solicitor, and although it was a matter of general belief in Bombay that the person Pectall accused was the guilty party, it was the opinion of the solicitor that sufficient evidence could not be obtained to ensure a conviction.

19. It will scarcely be necessary for me to point out to Government the total inadequacy of the punishment to the offence of which Pectall and Allen were found guilty. I observe that the subject has been brought to the notice of the Supreme Government by the Government of Bombay, and I consider it most desirable that the earliest opportunity should be taken for making the law much more effective for the punishment of persons who may be found guilty of tampering with the telegraph.

20. The result of the trial is, I am of opinion, most unsatisfactory, terminating, as it has, in the comparatively slight punishment of two boys, while the instigators of the fraud, for whom scarcely any punishment would have been too severe, have escaped free. This, I consider, is in part attributable to the defects of the law in the nature of the punishment it awards. Had the persons been transported beyond India, it appears to me the prisoners would have had great difficulty in securing their reward, and would in consequence have been far less likely to have screened the instigators; whereas, as the case now stands, they have simply to remain in prison for 18 months, on leaving which, their mere presence in the neighbourhood of Bombay will be a sufficient guarantee for the full payment from the instigators of the reward of their silence. The depositions taken before the magistrate at Sattara, which accompany your letter under reply, regarding a case of bribery in the Sattara Office, will be reported upon in a future letter, and the opportunity will be taken of reporting on other cases of a similar nature which have lately occurred at Indore, and with reference to the second paragraph of your letter, I shall also make the question of proposed departmental improvement, as suggested by the Government of Bombay, the subject of a separate communication.

21. The original enclosures of your letter are returned, as requested.

From A. D. Robertson, Esq., Acting Chief Secretary to the Government of Bombay, to W. Grey, Esq., Secretary to the Government of India (No. 496); dated 19 April 1861.

WITH reference to your letter (No. 194), dated 24th January 1861, regarding the falsification of opium advices from China to Bombay, I am directed to transmit to you a report, dated the 6th February last, from Captain Murray, as also a further letter from him (No. 68), dated 8th idem, with accompaniments, together with a memorial to the Supreme Government, drawn up by a Committee appointed by a meeting of merchants and others who assembled to consider the present condition of the Telegraph Department, together with a copy of the "Bombay Times" and "Standard" of the 26th March, containing an account of the trial, at the last criminal sessions, of the two signallers charged with interrupting the transmission of messages by cutting the wire near Poona, and copy of papers relating to the trial of two natives at Sattara for an attempt to bribe signallers belonging to the department.

2. The former of these papers have been retained pending the result of the trial before
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the Supreme Court, as it was hoped that one of these prisoners might turn Queen's evidence against the parties by whom they were instigated, and that the whole of the fraudulent practices connected with the department might be laid bare. This hope was frustrated, but Government believe that the facts which have been elicited on the trials both at Bombay and Sattara will sufficiently indicate to the Government of India the weak points, both in the law relating to electric telegraphs and in the departmental working of it, as to enable that Government to apply remedies to the case.

3. It appears to his Excellency in Council, that whilst making the law more effective for the punishment of all concerned in the tampering, falsifying, or divulging, or in instigating the tampering with, falsifying, or divulging of telegrams, that more efficient departmental arrangements should be adopted to enable the officers who have charge of the department to ascertain through whom the messages have been transmitted. From the inquiries which have been made, it has been ascertained that by the system at present in force no such record is left in the records of the department. At each of the repeating stations, also, well paid and trustworthy signallers, through whom alone all confidential messages should be transmitted, should be entertained.

4. The practice of signalling by private cypher should also be encouraged, by lowering the charges, so as to allow of groups of five figures to be charged as one word, as was formerly the case.

From Captain *R. Murray*, Superintendent of Telegraphs, Western Division, to the Secretary to the Government of Bombay (No. 66); dated 6 February 1861.

I HAVE the honour to acknowledge the receipt of Government Resolution (No. 136), dated the 5th instant, and, for the information of the Government of Bombay, to report the following:—

1. The examination of 10 of the messages containing opium quotations, sent from Galle to Bombay on the 31st December, shows that all these messages were correctly received into the Belgaum Office, and that only one of them was correctly received into Bombay Office, the remaining nine having been falsified either in the Belgaum or Bombay Office, or at some intermediate office or place. The written copies of the messages as sent from Belgaum to Bombay are correct; but this is no proof that the messages telegraphed by the signallers were word for word the same as the written copies, as there is nothing to prevent the signallers sending with them any alterations they may think proper to make; neither are there any means of proving how they may have sent them, and the exact words in which they were received in the Bombay Office, nor that the signallers in the Bombay Office recorded them as transmitted by telegraph from Belgaum. It is therefore quite impossible to determine if the falsifications were perpetrated at Belgaum or Bombay. The only message out of the 10 referred to, correctly received in the Bombay Office, was signalled by the assistant at Belgaum to the assistant at Bombay; but this fact proves nothing beyond exculpating both assistants from blame.

2. The messages of the 15th January have not yet been received from Calcutta, but four of them were examined previous to being sent to Calcutta, and were all found to be falsified. One of the messages so examined was the Commercial Bulletin, the assistant and two of the signallers were each taking a copy of it from the instrument on the quotations of Patna opium being given at 900 (before another word was signalled), a correction was signalled, and after some minutes delay 850 was substituted for 900, the 850 being a falsification; thus proving that, as far as the falsification of the messages of the 15th January were concerned, the Bombay Office was blameless.

3. On the 14th January the Bombay merchants, natives, offered bribes to the assistant in charge of the Sattara Office, if he would detain the next China news six hours; the two men were taken into custody on the 15th January, and have been, I am informed, sentenced to imprisonment with hard labour for six months, and a fine of 200 rupees each.

4. On the 15th January, after the Commercial Bulletin and four other messages had been received from Galle (all of them falsified), communication appears to have been imperfect between Sattara and Poona till 9.30 p.m., when interruption was reported. On the line being examined early on the morning of the 16th January, it was found to be cut about four or five miles from Poona, and in the immediate vicinity of where it was cut were scattered about the debris of timbers, Groves' cells, sulphate of copper, &c. &c. (the materials necessary for a battery). The inspector, on inquiry, ascertained that a small tent had been pitched there on the 15th January from 10 a.m. till 8 p.m., and that an European or Eurasian had occupied it. The situation of this place is considerably off the high road, and nothing but a footpath passes near it.

5. Mr. Wickham, the Deputy Superintendent, and myself are making every effort to obtain some clue by which to trace the parties supposed to be implicated, the result of which will be duly communicated for the information of Government.

6. In the meantime, by adopting a cypher for the transmission of the opium quotations in the Commercial Bulletin, we will frustrate any future attempt to falsify them.

7. From

7. From all the circumstances of the case which have come under my observation, I am strongly convinced that the falsifications have not been perpetrated in our offices, but by some person or persons unknown, who cut the line, inserted an instrument, received the messages, altered them, and then sent them on to the Bombay Office in their altered form.

From the Chairman and Committee of the Chamber of Commerce, Bombay, to the Chief Secretary of the Supreme Government of India; dated Bombay, 25 February 1861.

WE the undersigned, having been appointed a Committee by the public meeting held in the Chamber of Commerce in this city on Friday last, the 8th instant, to lay its proceedings before the Supreme Government, have the honour to submit the annexed report of those proceedings for the consideration of the Right Honourable the Governor General in Council.

2. They further beg to call the attention of the Supreme Government to the following Resolutions adopted by the meeting, expressing, it is believed, the unanimous sentiments of the mercantile classes of this Presidency:—

First. That the present state of the Electric Telegraph Department is such that the accurate and prompt transmission of messages cannot be relied upon with reasonable certainty, and that owing partly to the inefficiency, but still more to the apparent corruption of the department (as shown in the wholesale falsification of the late opium messages from Galle), the use of the wires has become highly dangerous to commercial operations.

Second. That this meeting is not satisfied that sufficient steps are being taken by the department itself to correct these evils, and prays the Supreme Government to take adequate measures to place the department on a safe and efficient footing.

3. In laying these proceedings before the Supreme Government, the Committee beg to direct pointed attention to the late falsification of the opium advices from Galle to this port, and to the general complaints of the speakers at the meeting as to the dangerous inefficiency of the department.

4. The Committee cannot see how irregularities so great as undoubtedly exist in the Telegraphic Department can be beyond the power of the heads of the department to eradicate, when such dereliction of duty would not be tolerated for a day in any private establishment. They would point to the efficiency of the telegraph lines throughout Europe, where interests equal to, and often greater than, any in this country are entrusted to the integrity of the signallers, without the errors, both wilful and accidental, which characterise the departments here. It appears to the Committee that military officers are not well fitted, from their previous training, for the control and management of the department, and that the work of organising a proper system of checks and supervision would be better entrusted to men who have been trained to business, and accustomed to systematic office work.

5. The Committee beg respectfully to represent further, that Act VIII. of 1860 provides no sufficient punishment for the offence of bribing, or attempting to bribe, the officers of the department, and to express their conviction that until the offence is made felony by law, and punishable with extreme severity, a radical cure of the corruption now believed to prevail cannot be looked for.

6. The Committee venture to express their hope that the answer of Government to this appeal will be such as to meet the just expectations of the public, and the importance of the subject will, the Committee has no doubt, secure for it the early and careful consideration of the Government.

7. The Committee would further respectfully submit to the Supreme Government that the system of telegraphic communication seems to be fully appreciated by the public in India, and is already so largely made use of that the amount received for private messages pays more than half the working expenses of the lines. Were the department placed on an efficient footing, so as to secure for it the entire confidence of the public, there can be little doubt that it would speedily become not only self-supporting, but a source of revenue to the State.

(signed) *Andrew Grant*,
Chairman of the Chamber of Commerce.
William Stevens,
Partner of Forbes & Co.
A. C. Gumpert,
Partner of A. H. Hushke & Co.

(signed) *Robert Knight*, Secretary.

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From *W. Grey, Esq.*, Secretary to the Government of India, to the Director General of Electric Telegraphs (No. 829); dated 29 April 1861.

* To Director General, No. 181, dated 24th January. Ditto, No. 185, dated 28th January. From ditto, No. 9131, dated 16th March.

IN continuation of the correspondence noted on the margin,* I am directed to forward to you in original the accompanying letter and its enclosures from the Government of Bombay (No. 496, dated the 19th instant), and I am desired to express the hope of the Governor General in Council that a full and clear report of all the circumstances connected with the recent occurrences at Bombay may strictly be submitted, as proved in your letter of the 16th ultimo. The case has attracted the attention of the Secretary of State, and the Governor General in Council will be glad to be able to forward your report to England at an early date.

2. In the present letter from the Bombay Government, you will observe that some suggestions are made for the improvement of the department. These you are requested, after careful consideration, to report upon, and the report should, if possible, be submitted at the same time as your report upon the Bombay frauds. It will be convenient, however, that it should form the subject of a separate letter.

3. The return of the original enclosures is requested.

— No. 5. —

CORRESPONDENCE respecting the DEFECTIVE WORKING of the INDIAN TELEGRAPHS.

Home Department, Electric Telegraph, No. 4 of 1862, 18 February.

To the Right Honourable Sir *Charles Wood*, Bart., G.C.B., Secretary of State for India.

Sir,

IN your Despatch, No. 14, dated the 8th of October last, you expressed a wish to receive the further reports regarding the attempts to bribe signallers, and the re-organization of the establishment of the Electric Telegraph Department, promised by the Director General in his letter of the 5th June 1861, and noticed in our Despatch, No. 5, dated the 14th idem.

† E. T. Proceedings, 9th July 1861, Nos. 14 to 16. Ditto, 9th September 1861, Nos. 3 to 5.

2. Reports on these subjects have been reported on our proceedings, as per margin; † and as regards the re-organization of the Telegraphic Establishment, we beg further to refer to our Despatch, No. 1, dated the 15th ultimo, with which we forwarded a communication from the Director General, dated the 20th of August, and a copy of our resolution in the Financial Department, dated the 10th of December, sanctioning the re-organization proposed by Colonel Douglas.

‡ From Director General, No. 2563, dated 14th January. To Ditto, No. 420, dated 22nd ditto. Notification, dated 22nd ditto.

3. We now transmit copies ‡ of our subsequent proceedings, including a notification published in the “*Calcutta Gazette*,” from which it will be seen that the establishment as now organized consists of the following officers above the grade of signaller:—

1 Director General, on a salary of 3,000 rupees a month.

3 Directors, 1 on a maximum salary of 1,500 rupees, and 2 on maximum salaries of 1,000 rupees each.

15 Superintendents, viz. :—

1	on a maximum salary of	Rs. 700	a month.
2	“ “ “	600	“ each.
4	“ “ “	500	“ “
5	“ “ “	400	“ “
3	“ “ “	350	“ “

15 Assistant Superintendents, at 300 rupees a month each.

100 Inspectors, viz. :

20	of the first class, at	Rs. 250	a month each.
30	“ second “	200	“ “
40	“ third “	150	“ “
10	“ fourth “	100	“ “

4. With our letter (No. 5), dated the 14th of June last, above mentioned, we transmitted to you the Memorial of a committee appointed at a public meeting of merchants and others at Bombay, “who assembled to consider the present condition of the Telegraph Department.” The resolutions passed at the meeting, and embodied in the Memorial of the committee, expressed an opinion very unfavourable to the working and condition of the department. We subsequently caused communications to be addressed to the Chambers of Commerce

at

at the three Presidency towns, requesting them to furnish the results of their practical experience as to the efficiency of the telegraph for commercial purposes, together with any suggestions which they might desire to offer for its improvement.

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5. The three Chambers having replied to this call, their letters were communicated to the Director General for his report on the propositions which they contained. Colonel Douglas's report,* and the communications received from the three Chambers, are herewith forwarded, and we beg to refer to our Secretary's letter (No. 360), dated the 15th instant, to the Secretary to the Bengal Chamber of Commerce, a copy of which is also sent, for the conclusions which we have formed on the various points discussed in the correspondence.

From Madras Chamber, dated 7th August 1861.
From Bombay Chamber, No. 151, dated 5th August 1861.
From Bengal Chamber, dated 14th August 1861.
From Madras Chamber, dated 7th October 1861.
To Director General, No. 1800, dated 28th September, and No. 3285, dated 22d October, 1861.
* No. 2044, dated 9th November 1861.

6. We are sanguine that the arrangements now sanctioned, together with the recent re-organization of the Telegraph Establishment, and the careful control and vigilance of Colonel Douglas and the superior officers, will conduce to increased efficiency in the working of the department.

We have, &c.

Fort William,
18 February 1862.

(signed)

Canning.

R. Napier.

H. B. E. Frere.

S. Laing.

Cecil Beadon.

W. Ritchie.

ELECTRIC TELEGRAPH—22 January 1862.

(No. 8.)

From Lieutenant Colonel C. Douglas, Director General of Telegraphs in India, to W. Grey, Esquire, Secretary to the Government of India (No. 2563); dated 14th January 1862.

IN reference to the recent sanction awarded by Government, and communicated in your No. 183, of the 10th instant, to the proposition for a re-organization of the establishment of the department, submitted with my No. 1263, of the 20th August last, I beg to recommend the following nominations to the several grades of superintendents and on the salaries mentioned.

To be Superintendents.	Salary.	Names.	REMARKS.
1st Class - -	<i>Rs.</i> 700	B. C. Bailey -	From the equivalent grade of deputy superintendent, on 400 rupees, with increase to 600 rupees, from the 1st current to be raised, from 1st May 1863, 50 rupees per annum, till the maximum is attained.
2nd Class - -	600	G. O'Donnell -	From the equivalent grade of deputy superintendent, on 400 rupees, with an increase to 500 rupees, to be increased 50 rupees per annum, from the 1st May 1863 till the maximum is attained.
2nd Class - -	600	C. Galbraith -	Ditto - - ditto - - ditto.
3rd Class - -	500	J. E. Todhunter -	Ditto, on his present salary.
3rd " - -	500	H. Wickham -	Ditto - - ditto.
3rd " - -	500	H. P. Owen -	Ditto - - ditto.
3rd " - -	500	H. Man -	From the equivalent grade of deputy superintendent, on 400 rupees, with increase to 450 rupees, the maximum to be attained on 1st May 1863.
4th Class - -	400	G. H. J. Smith -	Ditto, on his present salary.
4th " - -	400	J. H. Nowill -	Ditto - - ditto.
4th " - -	400	F. G. Teale -	From his present grade of assistant deputy superintendent, 1st class, on 350 rupees. This will involve no actual increase, as a contingent allowance of 60 rupees monthly, at present drawn by Mr. Teale, will now cease.
4th Class - -	400	M. R. Man -	From his present grade of assistant deputy superintendent, 2d class, on 300 rupees, with an increase to 350 rupees, the maximum to be attained on the 1st May 1863.
4th " - -	400	H. J. Waison -	Ditto - - ditto - - ditto.
Extra superintendent.	350	Lieutenant H. Mallock.	From his present grade of assistant deputy superintendent, 2d class, on 300 rupees. The remark on Mr. Teale's case will apply also to that of Lieutenant Mallock.
Ditto - -	350	G. Moberly -	Ditto, of officiating ditto, on 275 rupees.
Ditto - -	350	J. H. Lane -	Ditto - - ditto - - ditto.

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Promotion in pay is involved in the case of 10 of the above officers; the remaining five will not be affected by the change.

2. The increase in pay is, with the exception of that recommended for Messrs. Bailey, O'Donnell, and Galbraith, limited to 50 rupees per month; I have made a further exception in the case of Mr. Bailey, by recommending that the increase should have effect from the 1st current, on the grounds of Mr. Bailey's eminent merit, and of his being obliged to proceed to Europe for one year, at his own expense, for the recovery of his health, by which he will be put to very heavy expense. The annexures* will, I feel sure, support me in the view I have taken in making Mr. Bailey's case an exceptional one.

* Deposited.

3. I have confined the recommendations in the present instance to the grade of superintendents and extra superintendents, some inquiry being necessary ere recommendation can be safely submitted for the grades below them.

(No. 9.)

From *W. Grey*, Esquire, Secretary to the Government of India, to Lieutenant Colonel *C. Douglas*, Director General of Telegraphs in India (No. 420); dated the 22d January 1862.

* Extract, Financial Department, No. 14578, dated 10th December 1861.

I AM directed to acknowledge the receipt of your letter, No. 2563, dated the 14th instant, and in reply to inform you that, with reference to the sanction recently accorded* to the reorganization of the establishments of the telegraphic department, and in accordance with the arrangement indicated in the 16th paragraph of your Report, No. 1263, dated the 20th August last, the Governor General in Council is pleased to sanction the nomination of the undermentioned officers to be superintendents, with the salaries, present and prospective, shown opposite to each.

NAMES.					Maximum Salary.	REMARKS.
					<i>Rs.</i>	
B. C. Bailey	-	-	-	-	700	To receive 600 rupees per month, from the 1st current, with a prospective annual increase of 50 rupees a month, from the 1st May 1863, until the maximum salary is attained.
G. O'Donnell	-	-	-	-	600	To receive 500 rupees, with the prospective annual increase of 50 rupees a month from 1st May 1863, till the maximum salary is attained.
C. Galbraith	-	-	-	-	600	Ditto - - ditto - - ditto.
J. E. Todhunter	-	-	-	-	500	} To receive the maximum salary, being that now engaged.
H. Wickham	-	-	-	-	500	
H. P. Owen	-	-	-	-	500	
H. Man	-	-	-	-	500	
G. H. J. Smith	-	-	-	-	400	} To receive the maximum salary, Mr. Teale's contingent allowance being absorbed in his pay.
J. H. Nowill	-	-	-	-	400	
F. G. Teale	-	-	-	-	400	
M. R. Man	-	-	-	-	400	
H. J. Walton	-	-	-	-	400	} To receive 350 rupees, with a prospective increase of 50 rupees, from the 1st May 1863.
Lieutenant H. Mallock, Extra Superintendent.	-	-	-	-	350	
G. Moberly	-	-	-	-	350	} To receive the maximum salary.
J. H. Lane	-	-	-	-	350	

(No. 10.)

NOTIFICATION (No. 467); dated 22 January 1862.

THE Establishment of the Telegraph Department, above the rank of signallers, has been re-organized, and will in future comprise the following officers:—

1 Director General.	15 Assistant Superintendents.
3 Directors.	100 Inspectors.
15 Superintendents.	

The salary of the Director General is fixed at 3,000 rupees a month.

Of the Directors, the senior will ordinarily be appointed on a salary of 1,000 rupees a month, and will receive in the second year of his appointment, and in every succeeding year, an addition of 100 rupees a month, up to a maximum of 1,500 rupees. The two other Directors will ordinarily be appointed on a salary of 700 rupees a month, and will receive

receive in the second year of their appointment, and in every succeeding year, an addition of 50 rupees a month, up to a maximum of 1,000 rupees.

The Superintendents will be paid as follows :—

1	On a maximum salary of	Rs. 700	a month.		
2	"	"	"	600	" each.
4	"	"	"	500	" "
5	"	"	"	400	" "
3	"	"	"	350	" "

The Assistant Superintendents will receive each a salary of 300 rupees a month.

The Inspectors are classified as follows :—

20	First Class	Inspectors, on	Rs. 250	a month each.
30	Second	"	"	200
40	Third	"	"	150
10	Fourth	"	"	100

The following officers have been appointed by the Governor General in Council to be Directors and Superintendents respectively :—

To be Directors :

Major Patrick Stewart, in the Eastern Division.
Captain Robert Murray, in the Western Division.
Mr. J. T. Blissett, in the Southern Division.

To be Superintendents :

Mr. B. C. Bailey.	Mr. J. H. Nowill.
" G. O'Donnell.	" F. G. Teale.
" C. Galbraith.	" M. R. Man.
" J. E. Todhunter.	" H. J. Walton.
" H. Wickham.	Lieutenant H. Mallock.
" H. P. Owen.	Mr. G. Moberly.
" H. Man.	" J. H. Lane.
" G. H. J. Smith.	

(signed) *W. Grey,*
Secretary to the Government of India.

From *W. R. Arbuthnot*, Esq., Chairman of the Madras Chamber of Commerce, to *W. Grey*, Esq., Secretary to the Government of India; dated Madras, 7 August 1861.

I HAVE the honour, on behalf of the Madras Chamber of Commerce, to acknowledge the receipt of your letter of the 12th June, in which you apply to the Chamber for its opinion as to the general efficiency of the electric telegraph for commercial purposes; and you request that it will furnish a statement of the total number of messages sent or received during a given period, say from a week to a month previous to the date of your letter, by any firms or establishments connected with the Chamber, showing what proportion of them was delivered with reasonable punctuality and correctness, and in what proportion any delay or error occurred so material as to detract from the commercial value of this means of communication. You further state, by desire of his Excellency the Governor General in Council, that if the Chamber have any suggestions to offer for the improvement of the Telegraph Department, the Government will be glad to receive them.

I regret that I have been unable to procure the statistics for which you apply, the mercantile firms at this place not having anticipated the inquiry that has been instituted, and having kept therefore no separate record of the messages received and despatched by them. In the hope, however, that the information may still be useful, I have requested the members of the Chambers to record day by day their experience of the working of the Department for the current month of August, which I hope to do myself the honour of forwarding to you early in September.

The opinion of the Madras Chamber upon the general efficiency of the electric telegraph for commercial purposes is on the whole favourable.

Messages are occasionally delivered in language more or less mutilated, and for the deciphering of which the context would of itself be insufficient without a pre-acquaintance on the part of the recipient with the subject-matter. Errors too, arising from evident inattention of the signallers, but which might be productive of serious consequences, such as the substitution of the word "hundred" for "thousand," "four" for "five," and *vice versâ*, sometimes occur. Still, however, I have pleasure in repeating that, upon the whole, as far as I have been able to ascertain the views of the Madras Chamber, the Department has given satisfaction, and in this Presidency we have had no complaints of

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the messages being tampered with. Of the irregularities that do occur, I may confidently state that a large preponderance would be found in the messages transmitted from Calcutta and Bombay, while the southern and south-western lines have been comparatively free from them. I have also grounds for believing that the messages sent from hence to Calcutta would be considerably more numerous than they are, were it not for a want of confidence which, to a certain extent, prevails in regard to the prompt receipt of the reply telegrams.

The frequent interruption of the North Coast and Calcutta Line has been felt to be one very serious drawback to its satisfactory working. On a late occasion the interruption extended over a period of a week, if not 10 days, and this of necessity occasioned very great inconvenience.

Whatever may have been the causes, in times past, of such long-continued interruptions, it is hoped that a remedy prompt and effectual may be applied.

Believing that the expediency of telegraph stations being opened at every important commercial port along the coast has been fully recognized, the Chamber would take this occasion to bring to the notice of the Government that Cuddalore, the chief station of one of the most important collectorates in this Presidency, and through which the telegraph wires are already carried, is still deprived of the advantage referred to.

There are two other practical suggestions with which I will conclude. They are as follows:—

1stly. That the date and hour of despatch of a telegraphic message be included, if required, free of expense to the sender.

2dly. That in the case of messages delivered in an unintelligible shape, a refund be allowed, even though the repeating charge may not have been paid. The public at present has no redress unless, the higher charge has been levied; and the tendency of this arrangement is to make the signallers careless in the case of ordinary messages.

From *H. Brooke, Esq.*, Secretary Bombay Chamber of Commerce, to *W. Grey, Esq.*, Secretary to the Government of India, No. 151, dated Bombay, 5 August 1861.

By direction of the Committee of the Chamber of Commerce, I have the honour to acknowledge the receipt of your letter, No. 1176, dated 12th June 1861, requesting a statement of the total number of messages sent or received by the members of the Chamber through the electric telegraph during a given period, and desiring suggestions for the improvement of the establishment.

The Committee have circulated your letter to the members, and have received returns from 25 firms, giving the following results:

	Messages.
Received with reasonable punctuality and correctness - - -	274
With important errors or delays - - -	16
Unintelligible, or so delayed as to be rendered useless - - -	8
Total received between 1st April and 31st May - - -	298

Since the above period the delays have been very considerable on most of the lines, but more particularly on that between Bombay and Calcutta, where messages have not unfrequently taken six to eight days in transmission, and in several instances nine or ten days.

It appears to the Committee that where the contents of the messages are of no value to others than the addressee, and where the construction of the message is simple and grammatical, there is but little ground for complaint; but it would seem that where the temptations to divulge the contents of important messages were considerable, and had been systematically brought to bear on the employés, their integrity was found to give way.

The Committee feel it difficult to suggest to Government a remedy for this state of things; but as complaints of similar delinquencies are not frequent in England, they would venture to suggest that the establishment of a secret committee, under the guidance of an experienced officer trained in England, would probably have the effect of bringing to justice the real authors of these frauds. At the same time the Committee believe that an increased rate of salaries to the lower officials, with the prospect of rewards for exemplary conduct, would raise the general character of the establishment, and greatly promote its efficiency.

A copy of the return by the members is herewith forwarded for your information.

NUMBER of TELEGRAMS received by Indian Telegraphs during the Two Months from 1st April to 31st May by the following Firms.

HOW DELIVERED.

NAMES OF THE FIRMS.		With reasonable Punctuality and Correctness.	With important Errors or Delays.	Unintelligible, or so Delayed as to be rendered useless.
Messrs.	Ritchie, Stewart & Co.	- - 27	3	1
"	William Nicol & Co.	- - 29	- - None - -	- - - None.
"	Robert Strong & Co.	- - 11	- - " - -	- - - "
"	Wallace & Co.	- - 11	- - 2 - -	- - - "
"	W. A. Graham & Co.	- - 16	- - None - -	3 useless from delay; 1 unintelligible.
"	A. H. Huschke & Co.	- - 10	1	- - - None.
"	Lyon Brothers & Co.	- - 6	1	- - - "
"	Finlay, Scott & Co.	- - 15	- - None - -	- - - "
"	Lawrence & Co.	- - 11	- - " - -	- - - "
"	Leggatt & Co.	- - 4	- - " - -	- - - "
"	Killick, Nixon & Co.	- - 2	- - " - -	- - - "
"	S. Burstall & Co.	- - 6	1	1
"	W. J. Morgan & Co.	- - 5	- - None - -	1
"	Stearns, Hobert & Co.	- - 11	8	1
"	Watson, Bogle & Co.	- - 164	16	8
"	Alex. C. Brice & Co.	- - 18	Since 15th May the delays have been unusually great, probably caused by the monsoon.	
"	Grey & Co.	- - 6	- - None - -	- - - None.
"	Cardwell, Parsons & Co.	- - 4	- - " - -	- - - "
"	G. S. King & Co.	- - -	We receive but few messages, and so far as we recollect we have no great ground for complaint.	
"	Volkart Brothers	- - 33	Names several times mis-spelt.	None, as far as we remember, but recently the delays have been great.
"	Macindoe, Rogers & Co.	- - 5	- - None - -	- - - None.
"	Campbell, Mitchell & Co.	- - 9	- - " - -	- - - "
"	Robinson & Co.	- - 35	All pretty correct.	- - - "
"	and O. S. N. Company	- - -	- - None - -	- - - None.
Commercial Bank of India		- - -	Of the period enquired about we would not complain, but since the 30th April the delays have been very frequent: one message from Calcutta of the other day took nine days to come across.	
Chartered Bank of India, Australia, and China.		- - -	Many; especially from Calcutta.	Three or four within last week.
Suez Canal and United Service Bank		- - -	- - None - -	- - - None.

ELECTRIC TELEGRAPH, 30 November 1861.

(No. 23.)

From *H. W. J. Wood*, Esq., Secretary to the Bengal Chamber of Commerce, to *W. Grey*, Esq., Secretary to the Government of India, dated the 14th August 1861.

I HAVE the honour to acknowledge the receipt of your letter, No. 1168, of the 12th June, relative to the Telegraph Department, which has been circulated very generally among the commercial establishments of Calcutta, and I am directed by the Committee of the Chamber of Commerce to submit the following observations for the consideration of his Excellency the Governor General in Council:

The Committee consider that the Electric Telegraph Service of India is deficient in the two great points which can alone render it valuable either to the Government or the commerce of the country, namely, dispatch and accuracy in transmission. The Committee can only speak practically as regards the latter, and, in support of their opinion, they append, for the information of his Excellency the Governor General in Council, the opinions of most of the leading merchants of Calcutta upon this subject. It is not easy to understand why the working of this service should not have improved during the six or seven years which have passed since it was first opened to the public; but, with some exceptions, the Committee, from every-day experience, believe such to be the case. They are well aware that the superior officers in charge of the service are men of ability and zealous for its efficient execution; but, in consequence of what the Committee believe to be the cause of the present unsatisfactory working of the system, namely, defective construction and bad organisation, the exertions of these gentlemen are neutralised, and but of little value to the public. The Committee are of opinion that if the construction of the line had been entrusted to persons thoroughly conversant with the European system, and not to men who, as far as this particular system was concerned, were mere theorists, the chief defects now evident would have been avoided. Can it be expected

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that the telegraphic communication for all India can be maintained with anything like correctness or dispatch when the means of transmission is limited to the use of a single wire; and when this wire is employed by Government for many hours, as it frequently is, private messages must necessarily be detained, and their correctness endangered by the delay.

As regards the gross errors which so frequently occur in the messages, the Committee believe they are to be attributed to the mistaken policy on the part of the authorities who, for economical reasons, have thought proper to employ at low salaries, as signallers and copyists, persons chiefly natives and Eurasians, whose want of education and proper training renders them unfit for the appointments which they hold. The Committee are also informed that the inspectors employed are not sufficiently numerous to keep up an efficient supervision of the several lines in work.

It is generally believed by men practically acquainted with the working of the European system, an opinion in which the Committee fully concur, that telegraphic communication in India would be worked more satisfactorily and profitably to the Government and the public if it was entrusted to private enterprise, for which capital could readily be found in England.

EXTRACTS from the Opinions of the several leading Merchants of Calcutta.

IN reply to your letter of the 18th instant, we beg to say that the first thing required, in our opinion, for the improvement of the telegraph department, is that the superintendent should be ordered to be present in some part of the establishment, whence he can superintend its working, and where he will be accessible to the public. Major Douglas at present sits in a room at the top of a three-storied house; the whole working of the telegraph is carried on below on the ground floor. It is manifest, therefore, that he cannot be the least aware of the manner in which the work is done. On your wishing to have access to Major Douglas on business, (*sic*) is compelled to give a card to a peon at the bottom of the stairs, who carries it up to Major Douglas, and in time returns with permission to climb to the top of the house; this time being generally from 10 to 15 minutes, during which the victim has to walk about a dark damp passage without even anything to sit down upon.

It appears to us that the work of a telegraph office is, of all others, one which requires constant superintendence and appropriate accommodation, without which no good system can possibly be carried out. We should, before any other change, recommend that a convenient telegraph office be at once provided by Government without which the work can never be efficiently performed.

In reply to your circular regarding the electric telegraph, we beg to record our opinion that the two leading faults of which the mercantile community have a right to complain, are frequent delays in the transmission of messages, and an extraordinary want of intelligence on the part of those who reduce them to writing.

In a few messages which we lately exchanged with a firm at Madras, we find the following absurd blunders:

Hydrabhay for hydraulic.
Containing for contain.
Publication for application.

Ball for bale.
Celling for calling.
And thirtieth for thirteenth.

These six errors occurred in four messages.

With regard to the efficiency of the telegraph for commercial purposes, we think that, as it is at present managed, a merchant incurs a grave responsibility who acts upon any telegram the purport of which does not tally with his preconceived notions; or, in other words, that if a message reports an unexpected high or low rate of prices, it is probably a blunder of the telegraph, and cannot safely be acted upon.

With reference to your circular, dated 18th June, I beg to say I have no evidence to give of the working of the telegraph department for the time for which Government require it, viz., from a week to a month previous to 12th June; but former experience warrants my joining in what I believe to be the general opinion, that the telegraphic department has been culpable of gross neglect.

That the system of telegraphic communication in India has not improved as regards the correctness of the messages and the time occupied in their delivery during the last five years, is a fact to which I believe the public will generally bear testimony. The merchants and bankers certainly will.

The experience of one month in the year hardly conveys an adequate idea of the almost daily blunders which occur in the transmission of messages on all the lines, especially those received from Bombay and Madras, blunders which are liable to cause losses of great magnitude to the persons sending or receiving the telegrams. The following is an instance of this; but other facts could be adduced in which the errors were more numerous. I can only speak positively to the messages received, but there have been complaints from Bombay in regard to those dispatched:

17th May to 17th June.

Messages to and from Bombay and Galle; 21 received and 17 dispatched.

On the 16th, from Galle, hundreds were quoted instead of thousands of ounces.

On the 29th, from Bombay, unintelligible on 11th June, 6 days *en route*, and quite incorrect.

On 15th June, ditto ditto.

Four out of those received were not only useless, but, in the instance of one message, we had a narrow escape of serious loss, as, though the message received was found, when compared with original received from Bombay incorrect, yet the sentence was so connected as to remove any doubt of its correctness when received; luckily a later message was received the same day, which led me to doubt the accuracy of the first.

We shall be obliged by your submitting, for the information of the Chamber, the following case of imposition, for we consider it nothing less, on the part of the electric telegraph office:

We received this morning a bill for 7-5 rupees, for a message alleged to have been sent to our address from Bombay. The number of the message not appearing on the face of the bill as usual, we returned it with a memorandum requesting the information, and were informed, in reply, that "the message did not reach Calcutta." We then asked why we were called upon to pay for it, and were again informed, in reply, that "the message was duly sent from Bombay, but appears to have been lost on the road!" Our only course was to pay the bill, which we have done, and now enclose it and the memorandum for your inspection.

We make constant use of the wires in directions, and, taking last month as a criterion, receive or send on the average 64 messages monthly, each ranging in length from 16 to 100 words, in many of which errors to a greater or lesser extent occur; but on the whole we are satisfied with their general accuracy.

We therefore confine our complaints to the following, received within the last few days, which we have brought to the notice of the telegraph officials without obtaining a satisfactory explanation of the cause of the blunders made in transmission:

A message by letter from Mauritius, and correctly given for transmission by our agents in Galle, quoted a certain staple export four dollars per bag, but in the telegraph message it is given as five dollars per bag. We are aware that a neighbouring firm received a similar message in which the same error occurred, and we cannot regard this error otherwise than a wilful one on the part of some in the employ of the telegraph.

A message transmitted from London by letter to Bombay gives us a limit of two thousand pounds, which is delivered to us as one thousand, and the only satisfaction we can obtain is the same as given in the former case.

Attention ought to be called to the state of the lines between Calcutta, Akyab, and Rangoon, and to the alleged fact that between this and Jessore the wires are suspended on slim bamboo poles which gave way in every storm. This line has been virtually closed for months past through constant interruption.

Our experience of its operations has led us to the conclusion that, for commercial purposes, it is not of the least use as at present conducted. The two great essentials to render it valuable to commerce being wanting, viz., certainty of transmission within a proper time, and the correct delivery of messages. We have found that messages by telegraph have frequently reached their destination only a few hours before the copy of the same by post, and sometimes not until after the copy by post has been delivered. And frequently messages are so distorted and rendered unintelligible that they are not of the least use when received.

For these reasons we have not of late made use of the telegraph as a means of communication, trusting in preference to the slower but more certain delivery of messages by the post.

We do get a few telegraph communications occasionally; but we have never yet received one that was of any use to us, being either totally unintelligible, or utterly useless from being "too long on the road," generally both together.

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Our messages are very often too late and behind time. We had several messages from Akyab when the cable was in order, which occupied from eight to nine days!

We have continual causes of complaint for mistakes and omissions in telegraphing our steamers, and have recently on more than one occasion brought them officially to the notice of Major Douglas, but without effecting any reform. On a recent occasion also our Madras agents telegraphed to us, prepaying for our reply. Our clerk through inadvertence paid here for our reply, and on pointing out the double payment and demanding a refund, Major Douglas on the 11th June informed us he could make no refund here.

We have a very unsatisfactory account to give of our telegrams. They are often late, sometimes missing, and rarely correct.

We have had frequent cause of complaint.

Our experience leads us to place little or no confidence in the telegraph office as a means of transmitting messages.

The messages we receive are frequently unintelligible, particularly those from Galle. We think that if the hour of dispatch was stated in the messages, it would be an improvement and a wholesome check to irregularities.

We do not think that the Electric Telegraph Department can be considered as "efficient for commercial purposes" as it ought to be, and as it might be made, and there is still a sufficient amount of uncertainty about the receipt and transmission of messages as to prevent its being used as much as it otherwise could be, and to constitute a great drawback on its usefulness. It is not nearly so well conducted as in England or America, where mistakes and delays are rare indeed, and though in India it probably never will attain to the same degree of efficiency as in those countries, we think it is much more behind hand than it ought be.

At the same time we are far from thinking it as inefficient, as many may probably suppose it to be from the way in which it is abused in the newspapers, and from the cases there given (no doubt correctly) where it has failed; these cases of failure attract attention, but when all goes on well no notice is taken.

We have referred to our accounts, and find that, in 1861, we have sent telegrams to Ceylon 19, Bombay 7, Madras 5, Mirzapore and other places in India 9, Melbourne *via* Galle 6, London 10 = 56 in all. These are telegrams the result of which we know. We may have received about half the above number, and the result is that the telegrams have generally been sent and received pretty fairly in point of time, and that the words have come generally accurate enough to be intelligible, in most cases very nearly correct, and in a good many cases quite correct. Some lines appear to be served, being much better than others; for instance, Calcutta to Colombo; we have sent 19 messages, and received 20 in reply, and they were mostly in good time, and nearly all correct; probably this may be partly owing to the fact that all were to the same house and all the same subject. When delays and mistakes have occurred in this and former years, we have generally found them to be where we have parties telegraphed to for the first time, or upon new subjects. For two years we have been sending messages to a house in London always on same subject, and they always reach regularly and correctly. Lately we sent to Bombay, for London, three telegrams at same time, one to this house, and two to new houses. Anticipating difficulty, we had written in the beginning of the year to superintendents at Bombay and Galle, and sent lists of all houses in England to whom we expected to telegraph, in order that there might be means of correcting mistakes in names. Notwithstanding this, our telegram to the old correspondent arrived correctly, but those to the new ones only reached a fortnight later and were of no value. Recently we had a message six days coming from Bombay, and one was sent from Mirzapore, and has never been received by us at all. With these three exceptions we have no special cases of complaint, but in all three it appears to us that there must have been great carelessness.

Where messages are incorrect, it seems generally to arise from a want of intelligence on the part of some of the employés of the department. We make allowance for mistakes in case of new and difficult matters, but such stupid blunders are sometimes made as would seem to show that the parties making them can hardly understand the English language,

language, such blunders as are never made in England, and which the possession of ordinary intelligence would avoid.

We have referred to our own private experience of the working of the department, but we are all interested in public news, and we think the department is freely entitled to claim credit for the generally accurate dispatch of public news from England, China, &c., and of commercial advices to the Chamber of Commerce from England, Bombay, and China; in the China quotations, however, mistakes are made more frequently than they ought to be.

We do not use the telegraph as much as we would do if it were more accurate, and we believe it might be made much more accurate by the employment of better men, and their better payment necessary to secure a better class. We believe the department pays a profit at present, and, if so, it would be only just to improve it: we believe it would pay well also to do it, as many more messages would be sent. In cases of proved neglect, what is paid for messages certainly ought to be refunded, and part or the whole of such refund should be deducted from the pay of the person in fault. Good men should be employed, they should have good pay, and be told that they would lose part if they committed serious fault. This is the system in the Bank of England in the cashier's department, or used to be. The clerks were paid "risk money"; if they over-paid a cheque or lost money in other ways, they were liable to make good the loss; if they made no mistakes, they kept the risk money. We think that if some such plan were tried here it would be well; the good men would like it. At present it takes some time and trouble to write in with particulars of complaint, and all that is ever got is an expression of regret, the announcement that no money can be returned, and an intimation that the culprit has been reprimanded. We have generally sent in complaint ourselves, but we know of others who do not, considering that it is only waste of time as well as of money.

In reply to your favour, calling on us for an expression of our opinion as to the efficiency of the electric telegraph for commercial purposes, we regret to say we have no great faith in the utility of the department while under its present management, as through the frequent disappointments we have met with in consequence of the delay, or unintelligible state of our messages, we have almost ceased to make use of this means of communication, of which we would gladly and frequently avail had we any assurance that we could do so with the certainty that our messages would meet with even ordinary care in transmission. As it is, we are doubtful of the expediency of paying heavily for messages with a great chance of their miscarrying, or which may be delivered at a time, not only to be of no use, but possibly of harm, as the features of the matter of which they treated may have altered. We have suffered considerably ourselves by the length of time our telegraphs to Akyab, Galle, and other places have been in transit, and we have been put to much inconvenience lately by a message from Galle to our address not having reached us until five days after its date, and then in an unintelligible form. It ran thus:—"Muster for Leeds, no shillings for Graham." The superintendent refused to ask for a repetition, though the wording in its present form is meaningless, and has no reference to our business; and when we inquired if we must pay for this worthless affair, the reply was, that "If you do not pay, you will never receive another bearing message." In answer to our complaints to the superintendent here, we have generally been sent printed circulars, giving us no satisfaction or explanation whatever.

Not only in the working of the telegraph itself, but in the commonest details of the office, the greatest carelessness seems to exist; for so late as yesterday we received a letter addressed to us, enclosing a returned telegram intended for Messrs. Mackinnon, Mackenzie and Company, while that firm were sent a message intended for us.

In answer to your circular letter of date 25th instant, wishing our opinion with regard to the efficiency of the electric telegraph for commercial purposes, we have to state that our own experience of the irregularity and incorrectness with which very many of our messages have been forwarded, has caused us to conclude that this department of Government has been inefficiently wrought. Not a few of our intended telegrams never reached their destination; and the same applies to messages intended for us from other stations. Many were incorrectly forwarded, leaving the receivers only to guess at the meaning, and some were quite unintelligible.

Regarding the punctuality and correctness in the transmission of messages by the electric telegraph, we have to bring to the notice of the Chamber that a message from London, dispatched from Bombay on the 9th instant, reached us only yesterday evening, taking nine days for transmission, while the copy of the above message came to hand yesterday morning by the usual Bombay mail.

On several occasions we had to complain of the general management of the telegraph office for irregularities; we have always been told by the officials that we have to make our complaint either to Galle or Bombay, as the fault was never with them, threatening

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to stop all our messages if we did not pay for those that either we were overcharged for, or they came in an unintelligible language.

Dispatched from Calcutta,	For Steamer.	Leaving Galle,	Reached Galle.	Number of Days' Transmission.	REMARKS.
25th May 1861 - - - -	About 1st June,	- -	3rd June	4	Too late.
10th June „ - - - -	About 12th June, Bombay,	- -	- -	- -	Refused, because the line was interrupted.

Received in Calcutta.	Dispatched from Bombay.	Transmission,	REMARKS.
1st June 1861 - - - -	30th May - -	2 days - -	We have seldom received an English mail message in less time.
18th „ „ - - - -	8th June - -	10 „ - -	This message took the same time as the express letter which it was intended to anticipate.

We have not tried the electric telegraph much of late, because of the unsatisfactoriness of the working of it. Above is a note of our latest messages, and their result.

We have had frequent cause of complaint regarding our messages from Saugor and Galle, those from the latter station being frequently 24 hours and more behind the last of the public news. We have also had to complain that the rule which provides for private messages being sent off in the order in which they are tendered is apparently little regarded in the Galle office, and our experience of correspondence with the department for redress of grievances (even when made in the most specific form) is most unsatisfactory. The compulsory insertion in a telegram of the date and hour at which it was dispatched would, we think, be a practical benefit, and be generally acceptable even if adding slightly to the cost of the same.

We receive messages from Bombay on arrival of every mail, which occupy three or four days in reaching us, besides receiving and sending messages from and to Bombay and other places very often. With one or two exceptions they never have reached their destination at the time they should have done so, and sometimes messages that have been sent have never reached at all. We complained at first, but never got any satisfaction, and of late have kept no record.

Home Department.—Electric Telegraph.—(No. 1800.)

From *W. Grey*, Esq., Secretary to the Government of India, to Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India; dated Fort William, 28 September 1861.

I AM directed to forward for your consideration the accompanying copies of communications from the Chambers of Commerce at Calcutta, Madras, and Bombay, in reply to a reference made to them on the working of the telegraph department, and to request that you will favour the Governor General in Council with the expression of your opinion on the propositions contained in them for the general improvement of the department.

2. With reference to the opinion given by the Calcutta Chamber of Commerce, that the work would be better done by entrusting the management of electric communication to private enterprise, I am directed to inquire whether there is any line which, in your opinion, could, as an experimental measure, be conveniently entrusted to a private company.

I have, &c.
(signed) *W. Grey*,
Secretary to the Government of India.

From *W. R. Arbuthnot*, Esq., Chairman, Chamber of Commerce, to *W. Grey*, Esq., Secretary to the Government of India; dated Madras, 7 October 1861.

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WITH reference to my letter of the 7th August, I have now the honour to annex a return of telegraphic messages received and dispatched during the month of August, as furnished to me by three establishments, two of them houses of business, the third a joint-stock bank.

RETURN of Telegraphic Messages.

Messages received in August - - - - - 133

Of that number one message from Akyab came to hand in an unintelligible shape, and with figures altered and mutilated. Another from Rangoon was also scarcely intelligible, and two more contained trifling errors.

Messages dispatched - - - - - 139

The fate of these messages is thus reported:—

Never delivered - - - - - 2

Of which one was addressed to Kamptee and another to Tuticorin.

Serious and unexplained delay - - - - - 1

The above was a message dispatched 30th August to Kamptee, but not delivered till 6th September.

Unremarked upon, and therefore presumed to have been duly delivered - - 136

(No. 3285.)

Copy forwarded for information to the Officiating Director General of Telegraphs in India, in continuation of Letter No. 1800, dated the 28th September.

By order, &c.

Home Department,
22 October 1861.

(signed) *J. H. Rivett Carnac*,
Officiating Under Secretary to the Government of India.

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to *W. Grey*, Esq., Secretary to the Government of India (No. 2044); dated 9 November 1861.

REPLYING to your No. 1800 of the 28th September last, forwarding copies of communications from the Chambers of Commerce at Calcutta, Madras, and Bombay, and requesting my opinion on the propositions contained in them for the general improvement of the department, and whether I consider there is any line which could, as an experimental measure, be conveniently entrusted to a private company.

2. In the letter from the Calcutta Chamber there is no definite proposition made. The allusion to the indifferent working, which the Chamber anticipate will continue so long as a single wire is the only means of communication, points to the desirability of employing a greater number. I have already alluded to the advantages to be derived from a second line to Bombay in my No. 1526, of 12th September 1861, and the earliest opportunity will be taken, on the arrival of the new insulators, which it is understood are on their way, from England to report upon their efficiency or otherwise for insulating a double set of wires in the same supports in view to the sanction of Government being obtained to the employment of an additional wire on the Bombay line.

3. The Calcutta Chamber attribute the “gross errors which so frequently occur in the messages” to the employment of natives and Eurasians. From the evidence of the Complaint Office I do not consider that gross errors are frequent when compared with the number of messages transmitted, which, during the past official year, were 240,451, exclusive of those on departmental service. The complaints regarding errors only, during the same period, were 139, and this, although any obstacles that may have been supposed by the public to exist to redress in such matters, may fairly be considered to have been removed since the establishment of the General Complaint Office in 1860, and which was in efficient operation during the entire period alluded to by the Chamber. In justice to the signallers I must remark that, in consequence of the absence of insulation, and the difficulties resulting from the great distances between contiguous offices, communication is sometimes only possible with signallers skilled to recognise a word from two or three of its letters, and in this way correspondence has frequently to be carried on during the rains. Of course this is only possible with the best signallers.

4. Among the complaints in the extract from the opinions of the leading merchants of
0.43. 3 K 4 Calcutta,

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Calcutta, brought prominently forward as examples, I notice that four refer to the changing of figures, and are as follows :—

Thirtieth - for Thirteenth.
 Hundreds - for Thousands.
 Five - - for Four.
 One thousand for Two thousand.

The liability of the telegraph to mistakes of this nature is pointed out in Clause XVI. of the Rules of the Department, and the means suggested to lessen the risk of errors in this particular are laid down for the guidance of senders of messages, and where the recommendations there given have been acted upon, I have never known a single instance of error. The European public, although well aware that repetition is desirable for the correct transmission of numbers, persistently neglect the inexpensive insurance obtained by this method, or by giving the doubles or the halves, and I can only ascribe this to some such reason as that lately given to me by the manager of a local bank in conversation with reference to an error in numbers which had caused loss and inconvenience. It was to this effect : that so few errors occurred in their unrepeatd messages that they did not think it worth their while to pay for repetition. The only remedy for this state of things is for the department, in justice to itself, to do what its customers decline doing, and to make it a rule that in all cases of proper names, numbers, or words used in the abstract and without connection, and where no aid is consequently afforded by the context to the detection of error, that repetition of such words be given by the department without charge. Some such rule is indispensable if the department is to be held responsible for the refund of all messages in which errors are made. The Chamber allude with reference to errors to the "mistaken policy" of employing natives and Eurasians. Without importing lads from England, natives and Eurasians must be employed. The mass of our signallers are Eurasians, the sons of persons in humble circumstances, and doubtless many errors may be attributed to the limited education of these classes. from which alone, as a rule, the signalling branch of the department has hitherto been recruited. Assuming that there is no intention of importing lads from England, I believe that a larger introduction of native signallers would be an advantage. The recent experience of the Barrackpore Training School has shown that the natives, who have presented themselves for admittance into the department, possess, as a rule, a better knowledge of English than the class of Eurasians who usually seek employment in the telegraph, although the pay of the former on the scale lately introduced is only half that of the latter class, it has been found sufficient to obtain for the Barrackpore School all the native probationers that were required.

4. I consider the chief cause of error to be the youth of the mass of the signalling portion of the department, a consequence of the rapid extension of the lines, and perhaps to carelessness resulting from dissatisfaction on the part of those employed, and consequent frequent resignations. I attribute this feeling to the late short-handed condition of the department, which led to excessive work, and also to the knowledge of the signallers that, under such circumstances, their services could not be dispensed with. This knowledge led to insubordination, and its natural result, dismissal. Another cause of error is doubtless that to which I have before alluded, viz., the defective education of the classes from which the signalling ranks are filled.

5. The number of lads that have been trained during the past season, by increasing the strength of the offices, has rendered it possible to dismiss insubordinate signallers, and as every signaller now dismissed is debarred by departmental orders from re-entering the department, there is now more hesitation in leaving than was formerly the case.

6. Something may, however, be attributed to the method of receiving messages by sound. Under circumstances otherwise similar, I am inclined to the opinion that receiving by sound admits of at least equal accuracy to that of receiving by sight, but in the former, if a signaller mistakes a word or hesitates as to its meaning while thinking what word should be put down, several others immediately following, as well as the word on which the doubt arose, will escape his attention, and will be put down inaccurately rather than let the course of the message be interrupted, and this is especially the case when a junior and comparatively unskilled signaller is receiving from an impatient and smart senior. In receiving by sound it also frequently happens that the signaller, after receiving the first three or four letters, assumes the idea present in his mind as to what the word will be as correct, and neglects to notice any change in its termination. This is particularly the case with words ending in the plural number, and with such words as "battery," "repeated," "currency," which are liable to be changed into "battalion," "repealed," and "currently," and to any others with similar terminations. There was this great disadvantage in receiving by sight from the original Morse instrument, viz., that the signs were not coloured as in ordinary writing, but were merely embossed impressions on plain white paper which were at no time very legible, and were frequently almost illegible either from the light being bad, or from its not falling in the required direction, or from the difficulties which the adjustment of the apparatus necessary for the production of clear indentations offered to signallers; nevertheless, even under these disadvantages, the system of reading from the embossed tape does appear to have secured greater accuracy than receiving by ear, a result ascribable to the circumstance that under the former plan the receiver need not have the capacity of receiving as smartly as the transmitter that of sending, as the message, on being written down, could be read

at leisure. The re-introduction of the system of reading by eye would, I consider, with the present instruments, be impracticable, as I feel convinced that the loud click of the apparatus would have the same effect on the signaller accustomed to receive by ear who attempted to copy from the tape, as that of a person speaking in the hearing of another writing. The introduction, however, of the new French instruments, the click of the armature of which is nearly inaudible, and by which the message is written down on paper in a black pigment, will, I have reason to hope, lead to greater accuracy than hitherto, and this the more so as our establishment is so very largely composed of recently admitted and half-trained lads with whom correct receiving by ear is still a matter of difficulty. It must not, however, be supposed that by any system not purely and entirely mechanical error can be entirely avoided. At each station at which the message has of necessity to be repeated, whether it be received by eye or ear, it must be written down in ordinary characters on paper, and errors arise both in this writing down and in the reading of what is written by the signaller who has the duty of sending it on. A double line would materially contribute to reduce this class of error by permitting the exclusive use of one line for through messages only, thereby diminishing the number of repeating stations, and reducing the proportion of error from the causes just referred to.

7. The Madras Chamber make two propositions:—

1st. "That the date and hour of dispatch of a telegraphic message be included, if required, free of expense to the sender."

2nd. "That in the case of messages delivered in an unintelligible shape, a refund be allowed even though the repeating charge may not have been paid."

8. The first proposition is already in force with regard to service messages, and I have for some time had a proposal in view to extend the arrangement to private messages by charging for every word in the address instead of only for certain words as at present, and giving the date free in every instance.

9. Regarding the 2nd proposal, I consider that the present repetition charge is heavy, and that both it and the night charge might be reduced, the former to 50 per cent. and the latter to 25 per cent. upon the ordinary message instead of 100 per cent. as they both are at present. If the Government desire, I will offer no objection to the proposal to give refunds for errors on unrepeatd messages being experimentally introduced, limiting the refund to that portion of the message rendered unintelligible, and to cases in which it is clear that the portion has been rendered worthless by the error. This principle of partial refund on repetition messages has lately been introduced in consequence of its having been found that persons have not scrupled to claim refund for the whole value of a message in which a single word only had been erroneously transmitted. If the concession in the charge for repetition and night charge above suggested be approved, I think that the proposal to give refunds on other than repeated messages might, for the present, be held in abeyance.

10. The proposal of the Bombay Chamber has reference to the late frauds in that Presidency. As the recent cases are the first which are known to have occurred since the establishment of the telegraph in 1855, it does not appear to me desirable to appoint "a secret committee, under the guidance of an experienced officer trained in England," in view to bringing the real authors of these frauds to justice, more especially as they appear to be well known, and a want of evidence alone prevented their being brought to trial at the time of Pictall and Allen's conviction.

11. With reference to the concluding paragraph of your letter, the Bengal Chamber are of opinion that "telegraphic communication in India would be worked more satisfactorily and profitably to the Government and the public if it was entrusted to private enterprise." In no part of the world, with the exception of England and America, are the lines of telegraph in private hands; and I do consider that a mixed ownership of the system of lines on the continent of India would be at all satisfactory either to the proprietors or the public. There are already several lines of telegraph in private hands, I allude to those of the several Railway Companies which have power to transmit private messages in all cases where the Government have no co-ordinate lines. Should, however, other private companies desire to undertake telegraph management, there is no line which could be so conveniently made over to them as that connecting Calcutta with Rangoon and the local lines in that province. These lines connecting three very important places of commerce, Calcutta, Akyab, and Rangoon, with the advantages of possible extension to the port of Moulmein appear to hold out every prospect of being remunerative, and the fact of the telegraph lines in Pegu being very largely used in official correspondence, owing to the tardiness of postal communication, offers additional prospect of profit. Should the Government decide on such a transfer, I think it as well to mention that the offices are being weeded of unfit signallers, and provided with the best instruments, and I have little doubt but that by the end of the year both establishments, instruments, and lines will be in good order, and the business of the lines ready for immediate transfer to a private company. I may add that a line on which I have been requested by the Bengal Government to report, viz., an extension of the Calcutta and South Eastern Railway

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Telegraph, from the port of the Mutlah to the mouth of that river, might also, if decided on, be advantageously transferred to a private company.

Of the lines and offices in India generally, some (I may instance those hence to Bombay) are much more than self-supporting. There are others, however, which can expect no business except that derived from the Government. These are lines established for political objects only, such as that from Lahore to Peshawar. The value of the political services rendered by these lines may be considered by the Government as an equivalent for their cost, but no returns they are likely to yield at any early date would offer any encouragement to a private company to be connected with them.

I assume that the reasons which might incline the Government to make over a portion of the lines to a private company are, that such an arrangement would secure a more honest and economical administration than it is in the power of the Government to command. I do not believe there are any grounds for expecting either result. The English telegraphs are not free from the imputation of dishonest trafficking with the news committed to them for transmission, and the history of English Railways and other Joint Stock Associations, both in England and other countries, I think, proves that while business, if within the compass of a single individual, is as a rule much more economically conducted than it ever could be by Government, there is no reason for believing that where the extent of the business requires the resources of a company for its management, its administration would, in any respect, be more efficient or more economical than if under the management of the Government.

(Home Department.—Electric Telegraph.—No. 360.)

From *W. Grey*, Esq., Secretary to the Government of India, to *H. W. J. Wood*, Esq., Secretary to Bengal Chamber of Commerce; dated Fort William, 15 January 1862.

Sir,

I AM directed to acknowledge the receipt of your letter, dated the 14th of August last, replying to my communication No. 1868, dated the 12th of June.

2. The Chamber was requested in my letter of June to favour the Government with their general opinion as to the efficiency of the electric telegraph for commercial purposes, and to furnish a statement of the total number of messages sent or received during a given period by any firm or establishment connected with the Chamber, showing what proportion of them were delivered with reasonable punctuality and correctness, and in what proportion any delay or error occurred so material as to detract from the commercial value of this means of communication. It was intimated also that the Government would be glad to receive any suggestions the Chamber might have to offer for the improvement of the telegraph.

3. The Chamber, it is presumed, has been unable to furnish the statement of messages which the Government asked for, as no such statement accompanied your letter, or has been received since.

4. The Committee of the Chamber, in reply to the request for their general opinion as to the efficiency of the Telegraph Department, state that they consider the department deficient in dispatch and accuracy, though, they add, they can only speak practically as regards the latter. In support of their view on that point, extracts from the opinions of several leading merchants of Calcutta are submitted with your letter.

5. The committee observe that they believe the unsatisfactory working of the department to be owing to "defective construction and bad organisation," and they express an opinion that if the construction had been entrusted to persons conversant with the European system, and not to mere theorists, "the chief defects now evident would have been avoided." The defects of construction here alluded to are not specified in your letter. It is urged, however, and perhaps this is meant as an instance of defective construction, that neither correctness nor dispatch can be expected when the means of transmission are limited to a single wire.

6. With regard to the organisation of the department, the committee comment on "the mistaken policy on the part of the authorities who, for economical reasons, have thought proper to employ on low salaries as signallers and copyists persons chiefly natives and Eurasians, whose want of education and proper training renders them unfit for the appointments which they hold." The committee add that they have also been informed that the inspectors are not sufficiently numerous to keep up an efficient supervision of the lines.

7. Lastly, the committee state their opinion that "telegraphic communication in India would be worked more satisfactorily and profitably to the Government and the public,"

if

if it were entrusted to private enterprise, for which capital could readily be found in England."

8. Your letter and its enclosure, as well as the replies received from the Madras and Bombay Chambers of Commerce to a similar communication addressed to them by Government on the same date as that above mentioned to the Bengal Chamber of Commerce, have been communicated to the Director General of Telegraphs, and that officer has furnished a report on the subject, a copy of which and of the replies received from the Chambers of Commerce at Madras and Bombay I am directed to transmit for the information of the Chamber, and at the same time to communicate the conclusions of the Governor General in Council on the several points discussed in the correspondence.

9. It has for some time been in contemplation to put up a second wire on the line between Calcutta and Bombay, but the Governor General in Council is quite prepared to sanction the construction of an independent telegraph on that line (which of all others presents the most likely prospect of a remunerative business) by a private company if any persons are willing to undertake it. Six months, it is presumed, is sufficient time to allow for the formation of such a company, and if within that time measures are seriously taken for effecting the object in view by private enterprise, the Government will abstain from putting up a second wire, and will promise not to compete with any private line in that direction by reducing below the present rates, or below the rates adopted by the company if they should be lower than the present rates, the charge made on messages between Calcutta and Bombay, or between any two places at which offices connected with the private line may be established.

10. It must be understood, however, that the license to be granted for the erection of a private line of telegraph between Calcutta and Bombay would include a condition enabling the Government, whenever necessary, to claim priority of transmission for all public messages at the same rate of payment as that charged to the public generally. Subject to this condition, there would be no objection made by the Government to the construction of private lines of telegraph in any direction from one part of India to another.

11. The Governor General in Council is not prepared to make over to any private company or individual any Government line of telegraph already existing or projected, because he thinks it of the greatest importance that at least one medium of telegraphic communication between all the most important places in India should be in the hands of the Government, and entirely under the control of its own officers. His Excellency in Council thinks too, adverting to the suggestion made by Colonel Douglas in the 11th paragraph of his letter, that it would be inconvenient to make over either the Hooghly or the Mutlah River lines to a private company, as these lines are chiefly occupied with messages relating to the business of the port. Should it be thought, however, that, exclusive of this business, there is sufficient correspondence to occupy a second line, there will of course be no objection to the construction of such a line by a private company.

12. With regard to the employment of a different class of signallers on the Government lines, and especially with regard to the substitution of European for Eurasian and native agency, I am directed to call the attention of the Chamber to the remarks made by the Director General in paragraphs 3 to 6 of his letter, and to observe that, while it is impossible, without reckless extravagance and an entire disregard for the fair claims of all classes to public employment for which they are qualified, to substitute Europeans for Eurasians and natives as signallers in all parts of the country, it is also certain that, for the mere business of signalling, natives of India are as apt as any other class, and that under proper supervision they perform the duty as well as Europeans. For the higher situations in the department, it has been and will continue to be the object of the Government to avail itself of European agency as far as possible, and the Director General will be authorised to employ trained European signallers in the principal offices, where the extent and nature of the business require the presence of men of higher education, and possessing other qualities in which, generally speaking, the natives of India are found to be deficient. Natives are largely employed as signallers on the railway telegraphs, and it is certain that no private company could hope to make a line of electric telegraph in India profitable as a commercial enterprise if it were to employ European signallers exclusively, or even to any great extent.

13. The training of signallers in India, so as to secure a constant supply of qualified persons, is an object which has engaged the careful attention both of Colonel Douglas and his predecessor, and it is one of which the importance, I am instructed to state, will not at any time be lost sight of. It may be confidently expected that as the supply of qualified native probationers becomes fully equal to the great and increasing demand for their services, a result which the present rates of pay and prospects of promotion seem likely soon to accomplish, instances of inaccuracy and want of dispatch, so far as they are attributable to defective agency, though impossible under any circumstances entirely to prevent, will be reduced to a minimum.

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14. The Chamber will observe from the third paragraph of Colonel Douglas's report that the absence of insulation of the wires is referred to as one of the difficulties to be contended with in India in the correct transmission of messages. The question of insulation, I am directed to state, will be brought to a practical test, as soon as the new insulators, now expected from England, arrive.

15. The Governor General in Council is desirous that it should be brought prominently to the notice of the Chamber that it is almost exclusively in the case of unrepeatd messages that any cause of complaint arises, and that where repetition is resorted to mistakes do not occur. His Excellency in Council has now resolved, in accordance with the suggestion made by the Madras Chamber of Commerce, to allow refunds on unrepeatd messages on the same conditions as those on which refunds are given in the case of repeated messages, with the further proviso that no refund will be given for any error in an unrepeatd message arising from wrong figures being given, unless the precaution advised in the 16th number* of the telegraph rules shall have been adopted.

16. With reference to the suggestion contained in the 9th paragraph of the Director General's letter, that the repetition charge should be reduced from 100 per cent. to 50 per cent. extra, I am to observe that this reduction has been already carried out, repetition being now charged for at half price only, or 50 per cent. extra. The Governor General in Council sees no sufficient reason for reducing the night charge, which is also suggested by Colonel Douglas in paragraph 9 of his report, this charge being made on a wholly different principle from that on which the repetition charge rests.

17. In modification of the proposal made by the Madras Chamber of Commerce, the date and hour of dispatch from the Telegraph Office will in future be inserted on every message, free of expense to the sender, without any alteration in the present mode of charging for the address. The senders may still continue to date their messages if they please, but the sender's date, if inserted, will be charged for as at present.

18. On the whole, the Governor General in Council thinks it must be admitted by the Chamber that, considering the disadvantages under which the Indian Telegraph labours, especially the difficulty of obtaining a sufficient and constant supply of properly trained and qualified signallers, and the system of non-insulation which has been bequeathed to it under a belief that insulation in India was practically unattainable, its general efficiency, as the Madras Chamber of Commerce observes, is favourable. Out of 240,451 messages conveyed in 1860-61, only one hundred and thirty-nine (139) were complained of as erroneous, a proportion which is .0575 per cent., or little more than one-half per 1,000; while of the commercial messages delivered in Bombay during April and May last, 92 per cent. were received with reasonable punctuality and correctness, 5½ per cent. with important errors or delays, and only 2½ per cent. so delayed or mutilated as to be useless. And the statement furnished from Madras of commercial messages received at and dispatched from that place during August last is, it will be seen, even more favourable. The Governor General in Council by no means concludes that 139 represents the real number of messages in which mistakes occurred in 1860-61; but seeing that the rules of the department allow of refunds for repeated messages delivered in an unintelligible state, and for all messages in case of non-delivery or unjustifiable delay, it can hardly be denied that the proportion of complaints to the number of messages dispatched does afford some criterion of the general efficiency of the department. The statements regarding the commercial messages delivered in Bombay during April and May, and those received at and dispatched from Madras during August, I am to observe, are derived from the returns which the Bombay and Madras Chambers of Commerce have been good enough to furnish in compliance with the request contained in my circular letter of the 12th of June last, and the testimony which they afford therefore to the fair efficiency of the department cannot be doubted.

19. It is, however, freely and fully admitted by his Excellency in Council that there is great room for improvement, and that instances of messages delayed, mis-delivered, and inaccurately or unintelligibly rendered, are of much more frequent occurrence than they ought to be. The establishment has been recently re-organised and placed on a better footing as regards pay and promotion,† and the Government relies upon Colonel Douglas and the higher officers of the department to use the utmost care and vigilance in preventing mistakes, to investigate thoroughly every complaint, to visit every instance of proved neglect with suitable punishment, and to endeavour unremittingly to make the telegraph thoroughly efficient by promptly remedying such defects as can be corrected with the means at their disposal, and by suggesting to Government all other practicable measures required for the purpose.

I have, &c.
(signed) *W. Grey*,
Secretary to the Government of India.

† Financial resolution, dated 10th December 1861.

* The errors which chiefly occur are in the numerals, such as sixteen sixty, thirteen thirty, owing to the sound and first three or four letters being similar. To obviate this, it is recommended that in all financial or money messages the sum be given in two forms, halving or doubling the amount, thus: "Pay to my order 500 rupees or half 1,000." When this is done, an error is of very rare occurrence.

(No. 22 of 1865.)

App. No. 2.

Indo-European Telegraph Department.

To Her Majesty's Principal Secretary of State for India, India Office, London.

Right Honourable Sir,

Bombay Castle, 20 June 1865.

We have the honour to submit, for the information of Her Majesty's Government, the accompanying copy of a letter, No. 186, dated 14th instant, addressed under our orders to the Government of India, communicating copy of a report by Mr. Walton, Director of the Mekran Coast and Submarine Telegraph, on the defective state of the telegraphic communication between Kurrachee and Bombay.

We have, &c.

(signed) *H. B. E. Frere.*
B. H. Ellis.

(No. 186 of 1865.)

Indo-European Telegraph Department.

From Secretary Lieutenant Colonel *W. F. Marriott*, to the Secretary to the Government of India, Home Department, Simla.

Sir,

Bombay Castle, 14 June 1865.

ADVERTING to my letter, No. 124, dated 18th April last, submitting the recommendation of this Government for a double line of telegraph between Bombay and Kurrachee, I am directed to transmit, for the information of the Government of India, the accompanying copy of a further report by Mr. Walton, No 325, dated 25th May last, and its accompaniments, on the state of the telegraphic communication between Kurrachee and Bombay. His Excellency in Council trusts that the very important statements and suggestions of Mr. Walton will lead to effective measures being taken for improving the line between Kurrachee and Bombay.

Mr. Walton has been requested, so long as there is any chance of delay on the Indian line, to send by post, at the cost of the department, a duplicate of every message made over to the Indian Telegraph Office for despatch to any place in India, noting on such duplicate, the hour of transfer to the Indian Telegraph Office.

I have, &c.

(signed) *W. F. Marriott*,
Lieutenant Colonel, Secretary to
Government.

(No 325 of 1865.)

Indo-European Telegraph Department.

From the Director, Mekran Coast and Submarine Telegraph, to the Secretary to Government, Bombay.

Sir,

Kurrachee, 25 May 1865.

REFERRING to your letter, No. 84, dated 16th March, I regret that it is not in my power to comply with your request, as I have no means of ascertaining either the occurrence or duration of the interruptions to telegraphic communication between Kurrachee and Bombay, such reports being only sent to Calcutta to the Director General of telegraphs in India.

2. I deem it however my duty to bring to the notice of Government the serious delays that occur in forwarding European messages from Kurrachee to Bombay.

3. On several occasions during last month messages were detained from 30 to 60 hours in the Indian Telegraph Office here before they were even signalled to the first repeating station on the Bombay line. On personally calling at the Indian Telegraph Office on Monday last, I ascertained that at the Kurrachee and Hyderabad stations only, there were nearly 200 European messages awaiting onward transmission, and it appeared to be perfectly uncertain when these heavy arrears could be cleared off.

4. As the Chamber of Commerce at Bombay have addressed me on these frequent delays* it is apparent that much uncertainty exists as to whether this department or the Indian Telegraph is responsible, and for this reason I beg to lay before Government such facts as have come within my own knowledge and will enable his Excellency in Council the better to arrive at a correct conclusion on this subject.

* *Vide Appendix*
for a copy of their
letter and my reply.

5. Not only (as Government are doubtless aware) has no additional means been adopted to meet the constantly increasing influx of messages from Europe (there being merely a single wire from Kurrachee to Bombay precisely as when the telegraph was first constructed six or seven years ago) but the number of signallers now on the main line in the Sind Circle is actually less than it was before the Indo-European line was opened. In

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fact, at some stations the establishment is so inefficient that one signaller has to attend to two or three instruments for eight or 12 hours at a time. As a matter of course, therefore, European messages are delayed for hours and even days, and all local traffic is entirely suspended. To such a state are the intermediate stations between Kurrachee and Bombay now reduced that, unless immediate steps are taken to prevent a total collapse, it will be necessary to warn all the telegraph stations in England and Europe generally that messages can only be forwarded hence to Bombay through the post office. Even as it is messages would be conveyed more quickly by the mail steamers than by the telegraph.

6. I have this afternoon (four p.m. of the 25th May) again made inquiries regarding the onward dispatch of European messages, and I find that English messages which passed through our office here on the morning of the 22nd instant have not yet reached further than Hyderabad—a distance of 110 miles—although the whole of the line to Bombay is in good working order.

7. The Sind railway authorities agreed for a trifling consideration to rent to the Indian Telegraph Department one of their lines to Hyderabad, and thus local traffic and messages for the Punjab and Bengal would have been sent by the alternative line, and so relieve the main line of all but Indo-European messages. This proposal was telegraphed to the Director General of telegraphs in India on the 25th ultimo, but to this day no reply has been received.

8. I have above slightly sketched the state of telegraph communication between Kurrachee and Bombay during the fair season when the line is daily reported as being “in perfect working order,” but there is great reason to apprehend the usual total failure of the telegraph during the approaching monsoon, as I am credibly informed that no effective measures have been taken to prevent it.

9. I am the more anxious that Government should be accurately informed as to the real state of things in this respect, as the accumulation at Kurrachee for days of messages that have only occupied from 40 to 50 hours between London and this place must cause intense dissatisfaction both in India and England. Many of the telegrams now lying at Kurrachee arrived here and should have been delivered in Bombay in ample time to be replied to by the mail steamer to Suez of the 24th instant, and as the credit of this department may possibly be impugned, I would very respectfully suggest that the appointment of a commission to investigate generally the subject of telegraphic communication would throw much additional light on the subject and facilitate the introduction of many important reforms, more especially as the suggestion made by me in several previous letters that an officer should be appointed to make detailed arrangements for the interchange of telegraphic communication between the Indian and Indo-European Telegraph Departments has not yet received the approval of Government.

10. In concluding this letter, I beg leave to state that the present superintendent of the Sind Circle of telegraphs has done his utmost to facilitate the prompt receipt and dispatch of messages, and but for his efforts, the delays would be much greater than I have shown.

I have, &c.
(signed) *H. I. Walton*,
Director, Mekran Coast and Submarine Telegraph.

To *H. I. Walton*, Esq., Director, Mekran Coast and Submarine Telegraph.

Bombay Chamber of Commerce,
Bombay, 29 April 1865.

Sir,

I AM directed by the Committee of the Chamber of Commerce to request the favour of your supplying them with any particulars that may be in your power to furnish in respect to the receipt of telegrams by the Indo-European telegraph from London to Kurrachee; and again in regard to their further transmission from Kurrachee to Bombay.

A Committee appointed by the members of the Chamber to investigate certain facts connected with the working of the telegraph can find no data for ascertaining the time taken in transmitting a telegram between London and Kurrachee, in the first instance, and then again the time taken in the farther transmission of the same telegram from Kurrachee to Bombay. We find that telegrams from London to Bombay take on an average six days in transmission, very often eight days, but how much of this time is absorbed between Kurrachee and Bombay merchants have no means of knowing, as the telegrams received bear only the London date of dispatch, and the Bombay date of receipt. There is a very general impression that the delay complained of generally takes place on the line between Kurrachee and Bombay.

Any information you can supply in explanation of the points above mentioned will be thankfully received by the Committee.

I have, &c.
(signed) *James Taylor*, Secretary.

(No. 322 of 1865.)

Indo-European Telegraph Department.

From the Director, Mekran Coast and Submarine Telegraph, to *James Taylor, Esq.*,
Secretary to the Chamber of Commerce, Bombay.

Sir,

Kurrachee. 23 May 1865.

REFERRING to my letter, No. 283, dated 15th instant, and in reply to yours of the 29th ultimo, I have the honour to inform you that the average length of time occupied in the transmission of messages from England to Kurrachee, during the months of March and April last, was 122 hours, 26 minutes, and 144 hours respectively. This very high average is owing to the interruptions in Roumelia, at the end of March and beginning of April, caused by the floods in that country, as reported by me to Government and already published by them.

2. The number of messages transmitted by the Indo-European telegraph in March was 1,480, of which 1,443 were paid messages of a commercial and private nature, and 37 were Government despatches.

3. In April, the number of messages transmitted was 2,268, of which 2,255 were of a commercial and private nature, and 13 were Government despatches.

4. During the current month the average length of time occupied in the transmission of messages between England and Kurrachee will be considerably less than during the two previous months.

5. Regarding your inquiries as to the period occupied in forwarding messages hence to Bombay I am not in a position to give details; I have, however, strongly recommended Government to establish a Message Examiner's Office at Kurrachee for messages received from or for the Indo-European system of telegraphs, in order to afford a ready facility to the public for the investigation of complaints, and to avoid the present tedious and unsatisfactory system of reference to Calcutta. Should Government be pleased to sanction this arrangement, I shall be enabled in future to give the details for which you now ask. At present I can only say that messages after being handed over by this department to the Indian telegraph office here were detained in Kurrachee on some occasions during last month from 30 to 60 hours before they could be forwarded.

6. On inquiry to-day, I am informed that there are nearly 200 European messages now lying at the Kurrachee and Hyderabad offices alone, awaiting transmission to their destinations in India; and that exclusive of messages still pouring in from Europe it is not probable that those now on hand can be cleared off for two or three days. In the meantime local messages are altogether refused.

7. It is not in my province to enter into any explanation here as to the cause of the present state of telegraphic communication beyond Kurrachee: I have, however, communicated with Government on the subject.

8. I shall at all times be happy to give the Chamber any information as regards telegraphic communication between Kurrachee and Europe that may be consistent with my position as a Government servant. Without at present, however, venturing any opinion regarding communication eastward of Kurrachee, I might mention that the Kurrachee time is appended to all messages on their transfer to the Indian Telegraph Office here, and I would recommend the Chamber to suggest that such date should appear on the copy of the message delivered to the addressee. This course would at once obviate inquiry on the subject.

I have, &c.

(signed) *H. I. Walton,*

Director, Mekran Coast and Submarine Telegraph.

(True copies.)

(signed) *H. I. Walton,*

Director, Mekran Coast and Submarine Telegraph.

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(No. 48 of 1865.)

Indo-European Telegraph Department.

To Her Majesty's Principal Secretary of State for India, India Office, London.

Right Honourable Sir,

Bombay Castle, 21 November 1865.

WE have the honour to transmit the accompanying copy of a letter from the Director of Mekran Coast and Submarine Telegraph, No. 783, dated 27th October, submitting copy of a correspondence regarding the unsatisfactory manner in which the telegraph service between India and England is being conducted.

We have, &c.

(signed) *H. B. E. Frere.*
B. H. Ellis.
C. F. Erskine.

(No. 783 of 1865.)

Indo-European Telegraph Department.

From the Director, Mekran Coast and Submarine Telegraph, to the Secretary to Government, Bombay.

Sir,

Kurrachee, 27 October 1865.

WITH regard to the very unsatisfactory manner in which the telegraph service between India and England is now being conducted, I have the honour to report that the average time occupied in the transmission of messages between Kurrachee and Fão (or nearly one-third of the whole distance) continues to be under two hours.

* *Vide Appendix I.*

2. As messages are now taking 12 or 13 days in transit,* I addressed the Director General of Ottoman Telegraphs, whose reply is appended.

3. On the 19th instant we received a message from Paris which was dated the 17th, and which must have therefore been transmitted in about 50 hours. We have received others since in from three to five days, and which arrived here very correctly.

† *Vide Appendix II.*

4. As I have received a letter from Major Champain in which he informed me that he was urging the opening of the alternative route, I telegraphed to him on the subject,† but I have not as yet received any reply.

‡ *Vide Appendix III.*

5. I have also corresponded with Colonel Goldsmid regarding the opening to the public of the Russian route, but from his replies, copies of which are attached,‡ I think there must be some difficulty in the way of immediate action in the matter.

6. On reference to my letter No. 563, dated 7th August, it will be observed that I anticipated the present inefficient state of telegraph communication, but as the alterations there referred to were doubtless made for some good reason with which I have not been made acquainted, I am not in a position to go further into the matter. The blame, however, for the present very unsatisfactory working of the line does not entirely lay with the Ottoman Government, but with the system which has lately been adopted with regard to the messages passing through Europe.

7. Should there be no objection, I beg that his Excellency the Governor in Council may be pleased to allow this communication to be placed in the Editor's room, as such a course will render unnecessary the daily complaints addressed to me on the subject of this letter.

I have, &c.

(signed) *H. I. Walton*, Director,
 Mekran Coast and Submarine Telegraph.

APPENDIX I.

From Kurrachee,
 From Mr. Walton,

To Constantinople,
 To Director General of Ottoman Telegraphs.

Messages from England are now taking 10 or 12 days to reach Fão. Kindly favour me with the reason of so long a detention.

16 October 1865.

From Constantinople,
 From Directeur Telegraphs
 Ottoman's,

To Kurrachee,
 To Directeur Submarine Telegraphs.

Urgent.

Retards transmission Indo-Européenne dues interruptions causées principalement par des
 cas

cas de malveillance que direction vient de decouvrir, et en partie par la fermeture provisoire de la Station Italienne de Valona, cause maladie employés. Heureusement aujourd'hui toutes les lignes sont en bon état.

App. No 2..

21 Octobre 1865.

(True copies.)

(signed) *H. I. Walton*, Director,
Mekran Coast and Submarine Telegraph.

APPENDIX II.

From Kurrachee,
From Mr. Walton,

To London,
To Major Champain, India Office.

Messages occupying 10 or 12 days in transit through Turkey. Telegraph if Russian line can be used. Public disgusted with the present state of communication.

16 October 1865.

From Kurrachee,
From Mr. Walton,

To London.
To Major Champain, India Office.

Letter received. Messages arriving very correctly in three twice one and half days *viâ* Russia. They occupy 12 twice six days *viâ* Turkey. Telegraph when your views are carried out, as we cannot use Russian line without sanction. Acknowledge receipt of this message.

21 October 1865.

(True copies.)

(signed) *H. I. Walton*, Director,
Mekran Coast and Submarine Telegraph.

APPENDIX III.

From Kurrachee,
From Mr. Walton,

To Teheran.
To Colonel Goldsmid.

Messages arriving very badly. Latest dates 3d. Can we use Russian line yet? Public disgusted with Turkish mismanagement.

15 October 1865.

From Teheran,
From Colonel Goldsmid,

To Kurrachee.
To Mr. Walton.

Am now communicating with Turkish Director General on present bad working. Delay possibly occurs in Europe, for telegram sent to Constantinople on Thursday answered at Teheran Saturday. Average time of 13 Indian messages lately received by Russian line 10 days from Holland to Teheran. One to me from London five days. Will telegraph in answer to question again to-morrow.

16 October 1865.

From Kurrachee,
From Mr. Walton,

To Teheran.
To Colonel Goldsmid.

Latest dates *viâ* Constantinople 7th, and messages coming very irregularly. Latest *viâ* Russia 13th, and very correct.

19 October 1865.

From Kurrachee,
From Mr. Walton,

To Teheran,
To Colonel Goldsmid.

Latest dates *viâ* Turkey 12th, scarcely any messages passing since Sunday.

25 October 1865.

App. No. 2.

From Teheran, To Kurrachee,
From Colonel Goldsmid, To Mr. Walton.

I will write you on Russian line. Director General Constantinople again promises improved working in few days.

25 October 1865.

(True copies.)

(signed) *H. I. Walton*, Director,
Mekran Coast and Submarine Telegraph.

(No. 2 of 1866.)

Indo-European Telegraph Department.

To Her Majesty's Principal Secretary of State for India, India Office, London.

Right Honourable Sir,

Bombay Castle, 11 January 1866.

WE have the honour to transmit, for the information of Her Majesty's Government, the accompanying copy of a letter from the Director of Indo-European Telegraph, No. 90, dated 4th November last, reporting on the present condition and prospects of the Telegraph in reference to the complaint by the Press of its unsatisfactory working.

We have, &c.

(No. 90 of 1865.)

From Lieutenant Colonel *F. J. Goldsmid*, Superintendent Indo-European Telegraph, to Colonel *W. F. Marriott*, Secretary to Government, Bombay.

Sir,

Teheran, 4 November 1865.

THE perusal of an article headed 'Indian Telegraph,' copied into the *Bombay Times* of the 25th September last, from the *London Times* of the 26th August, has confirmed the intention which I had before entertained of submitting to Government a statement of the present condition and prospects of the Indo-European Telegraph, the direction of which has been entrusted to my hands. However temporary the nature of the charge as regards myself individually, I feel it incumbent to place on record the causes of shortcomings and failures, so that there should be no future misunderstanding on the subject at a time when successful working shall be the rule and not the exception. The public Press, especially in India, has been commenting freely on these things; and although I am not sensible that any personal allusions have been made to call for individual explanations, it is natural to infer that the Director General, or Superintendent of the Indo-European Telegraph, is the proper person to acquaint with his proceedings that Government to which he is immediately responsible. It will rest with His Excellency the Governor in Council to place such a statement* before the public, or otherwise.

* Or any portion of it.

Two years ago, after failure of the Red Sea cable, a new means of submarine communication from India westward, was found in the Persian Gulf. Under the intelligent superintendence of the late Lieutenant Colonel Patrick Stewart, this cable was laid from Kurrachee to the mouth of the Shatt-ul-Arab; and, at the active instigation of the same talented officer, a Convention was concluded with the Ottoman Government, stipulating for the use of a land line in course of completion through Asiatic Turkey, from Scutari to Fao. Further, and to provide against accident between Bagdad and Bushire, negotiations were opened for an alternative land line through Persia, of which these two stations were the termini.

The cable from Gwadar to Fao was laid in March; and the Turkish Convention signed in September 1864; the Turkish Asiatic land line first took messages from the cable in February 1865; the Persian auxiliary line opened in the following month. Colonel Stewart had died at Constantinople on the 16th January of the latter year, a few days before the first message was conveyed by the Indo-European Telegraph.

I am not aware that this *fait accompli* was received with any surprise. Reports were heard of international exchanges of congratulation; but little more. Being out of the way, at the time, of reading newspapers other than those on the table of Pera Hotel, I may have missed seeing a congratulatory notice that England had, for the first time, been linked to India by an electric wire of nearly 5,000 miles in length. Yet it did not appear unreasonable to suppose that some such article might have been written. And of the distance traversed, at least one-third was through a part of Asia where telegraphs were either comparatively new, or wholly unknown. Assuredly in this achievement, the magnitude of the work has not been exaggerated.

Now let us examine the whole line, and see, piece by piece, how it is composed, and under what control placed. We will next proceed to defects, causes, and means of amelioration, treating the subject generally and without unnecessary technicalities.

A message for despatch to India is given to a Telegraph Company, such as the Electric and International or Submarine. As a general rule Government has no connection with the London Telegraph offices, takes no part in a European Telegraphic Congress, and sends

sends its own ordinary despatches much in the same way as those of a private individual. The Indo-European message does not, therefore, start from the Government hands at all.

In finding its way to India, the telegram may take one of two great alternative lines—the Russian or the Turkish. I will not speak of the former at present, as it has been so little used, and, except for messages originating on the Continent of Europe, it is at present more or less in abeyance. By and bye I will revert to the subject.

To reach Turkey, or rather Constantinople, there are many ways. Perhaps the two principally used are through Vienna or Turin. The former transmits its despatches, to destination, by Servia, Wallachia, or such other route as may seem expedient. The latter, choosing the Italian coast line and cable across the lower Adriatic, seeks the Turkish capital by Salmica and the western shores of Marmora. The telegram may consequently be dealt with, more or less, by French, Belgian, Dutch, Prussian, Austrian, Bavarian, minor German, Italian, Servian, or Wallachian administrations, before coming into the hands of the Turks at all. A common convention, whether it be of Brussels or Paris, binds the above named *inter se*, but England has no part in the matter; and the European feeders of the Indo-European Telegraph, unprotected, to my knowledge, as far as Constantinople by any special rules, are subject to continental usage and practice.

Once arrived at Constantinople, the India-going message comes under the ægis of a convention called the “Indo-Ottoman.” This provides it with an exclusive wire through Asia, regulates its tariff, and so forth, up to Fao, where a British staff awaits it for despatch by cable. But from Constantinople to Fao, or about one-third of the whole distance from London to Kurrachee, the administration is Turkish; and a convention in Asiatic Turkey is not like one in the heart of Europe. We may provide for the exclusive use of one out of two wires; the Turks may, in their anxiety to do well, set up a third; in some places a fourth wire; but we cannot provide that the line shall be in working order and the wires free from contact. We may ascertain, by inspection and inquiry, what is requisite, and advise the administration accordingly; but it is out of our power to control the Government of a Foreign Power as if it were our own. The telegram in Asiatic Turkey is, therefore, to a great extent at the mercy of unsystematic and unskilled superintendents and signallers, and a poorly qualified executive, except in the lower grades, where there is activity and intelligence as well as good will.

Sometimes the telegram turns off from Bagdad, and makes its way, by the Turco-Persian frontier at Khanikeen, through Persia to Bushire. In this country there is a British director and staff, whose control is so far exercised that a message may be said commonly to traverse the eleven hundred miles of telegraph now set up, in about one hour. But the local Government is disinclined to delegate its authority over line guards to the English officers who direct the working of their Indo-European Telegraph; consequently, there are occasional interruptions through breakage, and the posts are not always of sufficient strength, or examined and renewed with sufficient attention. Majors Champain and Smith, Lieutenants Pierson and St. John, Royal Engineers, and Mr. H. V. Walton, deserve all credit for the generally excellent order of the Persian Telegraph; and it is but common justice to them and their assistants that the public should be made aware how little of the delay in Indian telegraphic correspondence can be laid to the transit by Teheran. Had the average speed in Persia been the rule throughout the line, messages between London and Kurrachee could pass in about five hours. But this telegraph is not ours; it is an affair of the Persian Government, and though worked under the authority of a temporary convention, the cost of establishment is paid by England without return whatever, except the additional security and development of her cable traffic in the Gulf and Arabian Sea.

From Fao to Kurrachee, as also from Bushire to Kurrachee, then, we have the only section of the whole line exclusively under Government control, and for which Government and its officers are directly responsible to the public. It is submarine, and therefore, however costly, needs no provision for daily watching; but a special steamer keeps guard over its well-being at Kurrachee; the cable stations at Gwadur, Mussendom, Bushire and Fao, are supplied with efficient establishments, and the director at Kurrachee, has his own particular staff. With the exception of two or three interruptions in traffic, owing to breaks in the cable, this line has worked admirably, and has realized good returns. The Indian public are well acquainted with the zeal and earnestness of Mr. Walton in managing his section; but, in comparing it with other portions of the whole line, they must bear in mind, that it presents no difficulties with which he cannot bring his own and his assistants' energies directly to contend. An equal amount of effort may be expended on an unsuccessful as a successful object; and to direct operations with efficient workmen under discipline, and supported by the governing authorities, is a very different thing from working with an inefficient establishment in a country where all honest remonstrance is stifled by ignorance in high places or individual interests, as in Turkey; or working for the benefit of a foreign Government whose officials are frequently more disposed to throw obstacles in the way than remove them, as in Persia.

I must not omit to mention the land section, or alternative line between Kurrachee and Gwadur. My own exploration of this part of the country in 1861-62, enables me to testify to the skill and perseverance which must have been evinced in setting up effectually the telegraph in Mekran, for which Mr. Walton has no doubt received the acknowledgments of Government. I am not in a position to judge of the extent to which this portion of the line is now used, but the public have probably experienced that it is a good standby in the event of injury to the cable on the Indian side.

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* Neither Government nor any officer of Government.

It will thus be understood, that Government* exercises no absolute control over outgoing telegrams to India, until they reach the submarine cable at Fao or Bushire; and no qualified control, except in the Persian alternative line. Whereas home-going telegrams are despatched by Government officials, but fall out of all Government control on reaching Turkish territory, whether at Fao or the Persian frontier at Khanikeen.

The above will, I trust, explain sufficiently the constitution and control of the Indo-European telegraph, to render intelligible an investigation of the main defects of the line, their causes, and how they can be remedied.

Resuming the old starting-point, I commence with England; and most respectfully record my opinion that as we have, in the present case, a line of telegraph, which on the Indian side, is in the hands of Government, so would it be advisable for Government to secure to the Indo-European telegraph its special wires of communication through Europe, by convention or written agreement with all continental States through which traffic to India may pass. To mature and propose in detail a scheme of the kind, might be now superfluous; but the arrangement would not be complex, and might almost be effected in a single interview at the respective head quarters of each administration. Whether a Government office should receive the messages or not in London, is another question. At present, I am merely contemplating certain minor and semi-political negotiations, which, to the best of my belief, companies would profess themselves incompetent to undertake; and which might, I submit, have been provided for, had we been represented at the late Congress of Paris.

With Turkey, as before shown, we had a convention at the time the through traffic commenced; but this document referred only to the new line in Asia, and on the European side delays and interruptions were frequent. The direct diplomatic communication already established with the Porte on the subject, was considered, however, sufficient warrant to negotiate generally upon the "Indo-Ottoman Telegraph," even after the formal convention had been concluded. It was proposed to obtain from Turkey some guarantee for efficiency west as well as east of the Bosphorus. In the end of February last, I was authorised to take up the question at Constantinople. At this time, I was not Director General of the line. But to make the matter easy of comprehension, I must become personal, and go back a twelvemonth.

My connection with the late Colonel Stewart, had been rather in a political capacity than any other. Employment on a special mission had caused me to accompany him on leaving Kurrachee to lay the cable in January 1864. We parted at Gwadur, to meet again at Mussendom, on the Arabian coast. Here orders reached me to remain with the telegraph expedition. When at Bagdad, in April, I was directed to proceed along the Turkish Asiatic line of telegraph up to Constantinople. Arriving there in August, I rejoined Colonel Stewart at the latter city. For the next three months, he was busily engaged in preparing the Ottoman Administration to meet worthily the responsibility they had incurred in their convention. They had undertaken the management of a long and difficult land line, which was to receive and return, in a foreign language, the cable communications of the Persian Gulf. There was reason to anticipate, not only irregularity in transmission, but incorrect apprehension in meaning of messages. When I returned in November from a few weeks' absence in England, he was still at his work. In December, I was about to leave him, under instructions to proceed to Persia, but the state of his health caused me to defer departure. I need not revert to the termination of his short but brilliant and useful career in the commencement of 1865.

Authorised then, as above stated, to take up the work in which the late Colonel Stewart was immediately engaged at the period of his last illness, I felt that the wisest course was to follow, as closely as practicable, that which he had himself traced out. It is unnecessary to enter into particulars of my interviews and correspondence with the Turkish authorities between February and May. The reports are on record at the India Office. I may, however, state, as a matter interesting to Government and the public, that the Ottoman administration is pledged, among other important concessions, to give us two special wires, one by Nissa, and one by Valona, and to construct an entirely new line for our telegraph by the former route. Moreover, I saw scrupulously fulfilled the engagement made to Colonel Stewart, to employ certain capable employés on the line, sent out from England, and obtained a promise, that 20 new telegraphers should be added to the insufficiently supplied stations in Asia. The delays and irregularities complained of were put before the Turkish officials in detail, and dwelt upon as forcibly as appeared advisable. And I may take this opportunity of acknowledging the invariable readiness of Mr. Stuart, Her Majesty's Chargé d'Affaires, at the Porte, to facilitate my dealings with the higher authorities of State, and the great advantage of his aid and influence whenever exercised.

In May, I was summoned to England, and, under instructions from the Home Government, took charge of the office of Director General from the 1st June. Intimation of my appointment had been telegraphed to me before this at Constantinople; but the circumstances which prevented me from acting on the telegram, cannot possess any general interest, and the letter of nomination and correspondence regarding it, were first seen by me in London some months after date.

But more remains to be said about Turkey. Our convention with that Power was to secure a means by which India was to be placed "in telegraphic communication with Turkey, and consequently with all the other States of Europe." The literal fulfilment has, however, failed hitherto to represent the spirit of the agreement. Telegraphic
despatches

despatches may be interpreted to mean despatches of such moment, that rapidity is everything to the sender, and worth, as in the case in point, one hundred times the cost of post. Now, that which is worth so much more in actual coin, ought to be just so much the more efficacious: and I believe that the Indo-European telegraph is capable, under good and systematic organisation, of being so rendered. I see no reason why messages should not pass to and fro between London and Kurrachee, in $5\frac{1}{2}$ hours, or 1-100th part of 23 days, which may be allowed for postal communication by the Bombay overland mail.

Mr. Courtenay, Commissioner for the Indian telegraph at Constantinople, has forwarded for my information, a table by which the average rate of the first five months' working from Kurrachee to Constantinople, is shown to be two days, eight hours, and from Constantinople to Kurrachee two days, 20 hours. He has not stated whether allowance has been made for difference of time in the computation; but this circumstance is not very material. If the European States worked in conformity with the Commissioner's average for Asiatic Turkey, the messages would take at least five days in reaching India, and such time is far too long.

App. No. 2.
March to July 1865 inclusive.

European Turkey is, however, responsible for delays and interruptions, during the above period, to an extent which could not have been anticipated when the late convention was drawn up and restricted to Asia. Mr. Walton has probably made public the actual time then required for out-going telegrams in transit from London to Kurrachee. At all events these data must exist in his records; and where the average is unreasonably and inexplicably higher than that struck by Mr. Courtenay, the onus of blame must, in my opinion, be thrown upon the Ottoman Administration, who direct their telegraphs west as well as east of the Bosphorus. Not that our London companies always chose the fittest European route, or that delays and verbal errors did not occur in Austria, Italy, or other Continental States; but that experience proves the heavier percentage of complaints was fairly referable to Turkey.

It is to be feared that in the three following months there has been considerable deterioration both in European and Asiatic Turkey, for messages have reached Teheran of late, very frequently 12 days from London, and I can guarantee that the delay is not occasioned in transit through Persia. On the 16th August last, Mr. Courtenay writes that "for several months past the telegraph service is very unsatisfactory; the delays on the Asiatic side have continued the same, if they have not even increased * * * The European lines of Turkey are, it is stated, also in a very unsatisfactory state, and nothing appears to be done to remedy the evil." On the 29th September: "Owing to the torrential rains and gales we have had during the last fortnight, the Turkish lines both in Asia and Europe are working very indifferently." On the 21st October, Agathen Effendi, the Director General of Ottoman telegraphs, replies to a telegram which I had despatched on the subject of existing delays, that these had been occasioned chiefly by malicious acts recently discovered, and partly by the temporary closing of the Valona Office owing to sickness of employés. A telegram three days later included "Line repairs" among the causes of interruption. Striking an average of eight days' messages now reaching Teheran from London, *via* Turkey, I find the time taken up by each amounts to nine days.

August to October.

Promises of amendment abound, as they ever did, and I have no hesitation in accepting those of the Director General of Ottoman Telegraphs as perfectly sincere. At all events, he cannot be said to want data for putting in order his Asiatic lines; Colonel Kemball, accompanied by Mr. Greener, an able practical assistant, inspected the whole line from Scutari to Bagdad in 1860, passing through Asia Minor in the depth of winter. I myself, aided by Mr. Kersting, Assistant Telegraph Superintendent, inspected the same line in the summer of 1864, leaving Bagdad in May and reaching Izmid in August. Colonel Kemball's minute report and recommendations have long been available for the guidance of the Ottoman Administration. My own papers on the subject were given to Colonel Stewart, and by him made over to the Turkish Telegraph officials more than a year ago; valuable suggestions on almost every practical point were, at the same time and in the same quarter, tendered by Colonel Stewart in person.

In his latest Telegram, the Director General now informs me: "dans peu de jours tout sera en parfait ordre;" but we have no precedent to enable us to receive this statement as satisfactory. His own good intentions and sincerity lead him to anticipate results which the system of the Government he serves renders problematical if not impossible. I see no remedy for the state of telegraphic correspondence in Turkey, but associating Englishmen with the native employés in the higher as in the inferior duties of the line; making, at once, the principal stations "Anglo-Ottoman" as at Fao; or else giving the whole line to a company or firm competent to work and supervise it—such, for instance, as Messrs. Bright and Clark, who have, moreover, a kind of vested interest in the cable from old association.

The first of these remedies I had the honour of suggesting to the Home Government in May;* but the question involved political considerations, and the re-opening of, or supplementing, a lately ratified convention, one intended to be final. Its off-hand settlement could hardly be expected. There is manifestly no better chance, at this moment, available for successful telegraphy in Turkey, than competition. Failing to cause the adoption of any course recommended by ourselves, it is not unlikely to produce another which may be equally beneficial. The loss of revenue should stimulate to exertion, if nothing else will; and competition is already assuming shape and substance in a daily improving Russian line.

* Appendix A.

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* Appendix B.

In submitting a paper of this kind to Government, I am aware that something more is required than a simple, practical proposal to satisfy the demand for rapid and regular telegraphic communication. Attention must be paid to the political features of the scheme, as well as its more general bearings. For my own part, I am unacquainted with any reason why the Indo-Ottoman Convention is to militate against an opposition route, if the latter be proved the better. So far back as December last, I wrote strongly in support of a recognition of Russian interests in the undertaking.* But setting aside personal impressions, the case stands thus. We have a convention with Turkey to enable us to keep open telegraphic communication with India through her dominions. She has gone to expense, and taken pains to carry out the terms of this convention. We are, therefore, desirous to avail ourselves of her lines as much as possible. It is found, however, in practice, that the Turkish route is more or less a failure. Turkey has not earned the whole blame, but she has certainly earned the lion's share. Our companies—that is, the British public by their agents—learn that an opposition line is available through Russia. They take supposed advantage of this, eagerly, to transmit hundreds of telegrams; but the rush was premature. The Russian line had not then reached good working order. They revert again to Turkey; but not in regard to conventions. The convention was to give the public a desideratum, not to bind them to a particular mode of correspondence. Now, however, the Ottoman telegraph lags, and the Russian telegraph gains strength. As a rule we are not using the latter; yet it has just given us a commercial message in Teheran in 72½ hours, while its rival cannot force on its burthen from London in less than nine days. Here success may perhaps be spasmodic, but time will show. On the other hand, the failure is becoming chronic. Turkey must bestir herself, or the competition will be fatal to her. I say nothing on the difference of rates, except that the difference is favourable to traffic through Russia. I have already addressed Government on this subject, and am about to submit further particulars.

To sum up the prospects of the Indo-European Telegraph, they are encouraging, even with reference to past results. It cannot be supposed that the electric wire can be conveyed for 5,000 miles by sea and land through the whole of Europe and south-west Asia with the same facility that its progress may be traced in pencil on the map. The Indian public need be patient for a little, say another year, or till past the ensuing winter, a season trying to new telegraphs, especially in such regions as the Caucasus and Asia Minor. I am humbly of opinion that, unless some unforeseen great accident, physical or political, intervene, they will, ere long, possess, whatever the route, the means of sure and speedy communication with the old country. In the meantime Government may rest assured that the officers honoured with its confidence will not relax in their endeavours to attain the desired end.

In the month of assuming the direction, I left London for Persia. On the way I had interviews with the Director General of Ottoman Telegraphs by appointment in Paris, and with the Russian Director General at St. Petersburg. To the former I repeated a warning, often resorted to before in Constantinople, that competition in Russia would be dangerous; but he quite discarded the notion, not from ignorance that the British public would use any line they pleased, but from disbelief in the efficacy of the competing lines. At Teheran I have been unavoidably delayed for three full months; but my detention is not, I trust, detrimental to the public service. The arrangements in India are well known to, and controllable by Government. In England, Major Champain's name† is a guarantee that the public interests will be studied. The same may be said of Major Smith and his able assistant in Persia. A report of my proceedings at Teheran will, I trust, be made by next mail; and with the completion of a new convention with the Persian Government, I shall not forget to submit what are the prospects of an alternative land line to the cable between Bushire and Gwadar, and a new direct communication between Constantinople and Teheran by the junction of the wires from Erzerum to Tabriz.

I have, &c.

(signed) *F. J. Goldsmid*, Lieutenant-Colonel,
Superintendent, Indo-European Telegraph.

† Appendix C.

APPENDIX (A.)

To the Under Secretary of State for India, India Office, London.

Sir,

Constantinople, 11 May 1865.

I HAVE the honour to submit the draft of a letter, which it has appeared advisable to address to Feizi Bey, Acting Director General of Ottoman Telegraphs. With it I have enclosed an original demi-official letter from Mr. Courtenay to myself, supplying certain data from records in his department.

I have called the attention of Feizi Bey to the apparent neglect of orders on the part of the Ottoman employés in Asia, whether as regards fulfilment of the provisions in the Brussels Convention, or the ordinary duties of the service. The time taken up in transmission, the irregularity in the mode of despatch, the indifferent orthography of the telegrams; all these subjects have been, more or less dwelt on. I have also alluded to his own (the Acting Director's) verbally expressed intentions to increase the personnel of the Asiatic lines, and his admission to myself that the Indian work is greater than he had anticipated.

anticipated. I have, moreover, urged the necessity of keeping pace in Asia, with the improvements about to be introduced into European telegraphic correspondence under the late Paris convention, such as direct communication, by large wires, with principal towns like Bagdad, and have again warned him of the probable diminution of traffic, owing to the defects of the service.

The latest part of Mr. Courtenay's demi-official letter to my address shows how great a realisation has already been effected by the Indo-European Telegraph, and what results might reasonably be expected, were the communication more rapid and regular. The question of accounts is made the subject of a separate letter.

As regards the work on which I have been more immediately engaged, under letters from your office of the 13th February and 2d March last, matters have so far progressed, that the Imperial "Irâdéh" for the new special line to Nissa has, some days since, been issued, and one of the clerks to be employed in the Turkish offices has arrived from England. But I regret much to state that the manner in which the correspondence is conducted throughout the Turkish dominions, especially in Asia, is far from satisfactory. Delays are frequent; despatches are irregularly transmitted; and, though promises are profuse, I do not see that the improvement which we had a right to expect from two months' practice, has yet become manifest. I hear it urged that one of the drawbacks to present efficiency is the absence in England of Agathon Efendi, the Director General; but I am necessitated to look upon this as the excuse too readily provided for the occasion, and far from valid or sufficient.

I would not disclaim the hopes expressed at the conclusion of my letter of the 5th ultimo. Doubtless, very great delays occur in India, and many in Europe out of Turkish territory, which are erroneously attributed to the Ottoman Administration. Indeed, there are data to establish the truth of this supposition; and, on this account, I feel reluctant, without fuller information, to press the question of the more recent telegrams. Still, I would venture to express an opinion, that the surest and safest way to obtain a line which would work to the satisfaction of the public, is by supplementing the present convention with certain clauses admitting a joint control on our part, at least in the Asiatic lines, and having Anglo-Turkish Stations, such as at Fao (Article III. Indo-Ottoman Convention), for the inland offices of Bagdad, Diarbeker and Sivas or Angora. With these new personnels might be associated one or two qualified inspectors. We require in Asia a staff of men working in a different spirit from ordinary Oriental employes and evincing active interest and zeal at all times as well as for a special occasion.

But there is no doubt that such a proposal would not be entertained without refutation of many and plausible arguments for a contrary course. Under any circumstances, however, the first and most natural proceeding would be to submit to the Ottoman Government the complaints which now present themselves; and I will endeavour to make the subject of my letter to the Acting Director General, one for the consideration of the higher authorities at the Porte.

I have, &c.
(signed) *F. J. Goldsmid*, Lieutenant Colonel.
On special duty.

MEMORANDUM.

THE above, though not far from a verbatim copy, cannot be attested as such. Having no clerk or personal assistant, I have frequently to draft, copy, and record my own letters, and time sometimes fails me, at the departure of the post, to do all that is required for completeness.

F. J. Goldsmid.

Teheran, 27 November 1865.

APPENDIX (B.)

"In talking with Colonel Stewart the other day on a revised proposition which he has recently made regarding the Persian telegraph, I could not but feel that the surest means of success would be to interest the Russian Government in the proposal, by drawing out a convention with Russia, as well as with Persia and Turkey, and utilizing the Russian line for India communication as well as those of the Mahomedan nations. Supposing the interests of Saint Petersburg joined in this instance to our own; the Persian Government would, at least, lose one of those advisers who would be jealous of the introduction of Englishmen and English measures."

The above is an extract of a letter written by the undersigned to Captain W. Eastwick, dated Constantinople, 8th December 1864. Since that period, he has been confirmed in the views here expressed, by experience on the subject acquired both in Russia and Persia.

(signed) *F. J. Goldsmid*, Lieut. Colonel,
Superintendent Indo-European Telegraph.

Teheran, 27 November 1865.

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APPENDIX (C.)

(No. 35 of 1865.)

To the Under Secretary of State for *India*.

Sir,

India Office, London.

I HAVE the honour to submit for the sanction of the Right Honourable the Secretary of State a recommendation, that for the present, and until the result of the proposed convention with Persia become known, Major Champain of the Royal Engineers be authorised to remain on duty in England, receiving such references as are intended for myself, and disposing of such as do not require to be forwarded for my own opinion and report.

My object in making this proposition is to avoid the great loss of time which must ensue should all ordinary reports on telegraphic details follow me from place to place, while en route to Persia, or from Persia to India. I have made the necessary intimations to the Secretary to the Bombay Government, the Director of the Mekran Coast and Submarine Telegraph, and the Commissioner for the telegraph at Constantinople, noting that any urgent references may be made to me direct, by letter, care of Her Majesty's Minister at Teheran.

The records of the department found in possession of the late Colonel Stewart were not voluminous, but such as there are, I do not think it would be advisable that I should take them in journeying rapidly through Russia and Persia. Moreover, to these I have added some few which have accumulated during my recent stay at Constantinople. All these I would propose to leave, for the present, in charge of Major Champain. This officer's presence will be further useful in attending to indents for stores, which have been or may yet be received at the India Office. His experience and advice will be of assistance in obtaining good materials, and in some instances he would be enabled to attend to their shipment and despatch to destination.

But in our present relations with the Ottoman Government I deem it quite necessary that he should be enabled to proceed at any time to Constantinople, where great attention is still required to perfect the Asiatic lines. Before starting for St. Petersburg, I purpose attending an appointment in Paris with Agathon Effendi, the director of Ottoman Telegraph, now engaged in procuring and purchasing materials for the Turkish lines. He is anxious to see me before leaving for Constantinople, and I shall take the opportunity of mentioning to him the very useful advice and assistance he may at all times depend on receiving from Major Champain. It will be important to know that the Turks act up to their promises made independently of the convention, and do not let the favourable season pass without using their best efforts to provide for the almost inevitable interruptions occasioned by winter and bad weather to the line in its present condition.

A recent correspondence with the Secretary of the Elective and International Telegraph Company in London, has disclosed the likelihood of employment of the Russo-Persia line to the detriment of the Turkish one, against which there has been much cause for complaint; and I am of opinion that this circumstance should be brought to the notice of Agathon Effendi, with a view to draw the serious attention of his Government towards immediate and complete amelioration.

Should Major Champain's services be required in Persia, or any other arrangement than that now proposed appear desirable, after my arrival at Teheran, I will not fail to address your office again on the subject, and telegraph if necessary. But in the present state of affairs, and especially while the operations of the Indo-European Telegraph demand constant watching, I think that it would be well to take advantage of the presence of Major Champain in England to turn his experience to account in the mode proposed. I have, however, expressed but in a very general manner, the nature of the temporary duties on which he would be engaged.

I have, &c.

(signed) *F. J. Goldsmid*, Lieutenant Colonel,
Superintendent Indo-European Telegraph.

London, 24 June 1865.

(No. 214.)

To the Under Secretary of State for *India*.

Sir,

London, 31 August 1865.

As dissatisfaction with the working of the Indo-European Telegraph is being expressed by the public, I feel it my duty to request you to lay before the Right Honourable the Secretary of State for India in Council the following remarks.

On the 18th June I received a Telegram from Major Smith at Teheran, complaining that numbers of messages for transmission to India were being received at his office from Russia; that they were nearly all unintelligible, and had been very much delayed. Colonel Goldsmid was not then in London, so I drew out a short memorandum (a copy of which No. 198 A, I now enclose), which I submitted to that officer and to Colonel Baker.

The

The Secretaries of the Telegraph Companies in London were also enjoined that no despatches for India should be sent otherwise than by Constantinople, the established route. Altogether, however, not less than 400 messages were sent *viâ* Russia, and I fear that most of them must have proved impossible to decipher.

On the 14th July, after receiving a letter from Mr. Courtenay, our Commissioner at Constantinople, complaining of the inefficiency of the Turkish telegraphic arrangements, I wrote the accompanying Memorandum No. 202, which I also submitted to Colonel Baker and to Colonel Goldsmid.

Colonel Baker, after showing it to Sir Charles Wood, informed me that it was not considered advisable to enter into any agreement with the Russian Government with a view to improve their system, and thus develop a new line, which would, to a certain extent, diminish the traffic through Turkey.

I now, however, venture to make the following observations. There is no doubt that messages to and from India are unnecessarily and vexatiously delayed, and public confidence in the undertaking is being shaken. The organisation of the Turkish lines is defective, and, in my opinion, will continue so, unless some decided step, such as the establishment of an opposition route be taken. Mr. Courtenay invariably writes that either the Turkish Asiatic, or the Turkish-European lines are working badly; and it does not seem that Colonel Goldsmid's suggestions have yet been complied with. I know that the insulators we proposed for the new wire between Constantinople and Diarbekir were rejected as too expensive, and cheap inferior ones were to be ordered from Belgium. In some measure, however, I can account for delays of late in consequence of the cholera panic, which frightened the telegraph clerks from their posts. Still, I maintain that blame is due to the Turks, and I much fear that they are really unable to work up to our standard of efficiency. Mr. Walton, the director of the Cable, writes to me that, "Our messages from Kurrachee to Fao, and *vice versa* average 74 minutes, for the last three months;" and that "the Bagdad men report 70 or 80 messages on hand, send 12 or 15 and then smoke hookahs or say their prayers for two or three hours, during which time Fao hears nothing more of them."

Our cable, therefore, is working admirably, for months past there has been no interruption on the Persian line, and yet all our endeavours are nullified by the bad arrangements in Turkey.

On the other hand, the Russians are naturally anxious to help our through communication, and have now offered to place their line from Petersburg to the Persian Frontier entirely in the hands of a well-known London firm. Mr. Siemens, the head of that firm, spoke to me lately on the subject, and would, I believe, be willing to accept the offer, if there were any probability of his also obtaining the control of the Persian Line from the Tabreez frontier to our telegraphic centre at Teheran. I am convinced that, supported by Russian influence in Persia and not opposed by us, he would succeed; and then we should, without having taken active steps in the matter, obtain a second and a really reliable line of communication between England and the Persian Gulf. Such an arrangement would also do more to render the Constantinople line efficient than any remonstrances that we can make, now that the Turks know we are entirely dependent on them.

If I might officially, or even privately, inform Mr. Siemens, that the organisation of a duplicate line *viâ* St. Petersburg would not be opposed by the English Minister at Teheran, I believe that no great time would elapse before through communication with India would be placed on a firm and satisfactory basis.

I have, &c.,
(signed) J. U. Champain.

(No. 202.)

MEMORANDUM.

London, 14 July 1865.

THE object is to establish a well-organised system of telegraphic communication between England and India *viâ* Petersburg, Tiflis, and Teheran, which would, in case of failure of the Bagdad line, take the whole of the Anglo-Indian traffic, or, under any circumstances, tend to keep up a healthy spirit of rivalry in the management of the opposition, or Turkish line.

To do this it is necessary to consider what steps can fairly be taken in Russia and what in Persia.

It appears to me that certain proposals might be made to the Russian Government regarding the organisation of their lines, especially those in the Caucasus and Georgia, the acceptance of which proposals should depend on whether Persia were inclined to assist in the undertaking or not.

The Russians know well enough that they cannot rely on traffic, the amount of which will vary according to the condition of the Julfa and Teheran lines. But I feel sure that, if the Persian portion of the through telegraph were put in satisfactory order, the Russians would be willing, and even eager, to incur the extra expenditure which would suffice to bring their own part into a thoroughly efficient state.

With regard to Persia, I think that we might induce the Russian authorities to offer to take over the line from Julfa to Teheran on similar terms to those on which we hope to

App. No. 2.

get the Bagdad, Teheran, and Bushire line; and I think the Persians might, if they saw the English and Russian Government anxious for it, consent to such a scheme.

We shall, if Colonel Goldsmid succeeds in his present mission, have the control of two of the three principal lines in Persia, namely, that from Bagdad to Teheran, and that from Teheran to Bushire; and it might give rise to suspicion and jealousy if we tried, at present, to get the third as well.

If, however, there should be objections to the above idea, it will be requisite to take the Julfa line into our charge on terms almost identical with those that Colonel Goldsmid is authorised to offer for the other lines. We should have to add a second wire, and supply an English staff for working it, keeping a proportion of the receipts.

Supposing either of the above measures to succeed, it would be obviously the interest of Russia to bring her lines into perfect order, to add a second wire exclusively for through traffic, and to work it by signallers acquainted with the English language, if she could be convinced that a fair portion of messages would fall to her share.

Should Russia manage the Julfa line at her own charges and risk, I think we could not be expected by Turkey to alter the rates on our line at all. Competition between the Russian and the Turkish lines would then produce advantageous results, both as regards cost of messages and general efficiency. The English companies would of course use whichever route they pleased: and I am of opinion that the Indian Telegraph Department should either use the two routes equally, or leave the choice to the sender of each message.

But if, on the other hand, the British Government organise the Julfa line, it is possible that the Turks might complain with some show of reason at our having given active assistance to a scheme which must either injure the interests of the line which the Turks put up at our instigation, or at least produce a diminution of the rate to which we agreed. It would then become our duty to devise a plan which would equalise the charges either way, and this can be done, I think, without difficulty; as, however, it demands some consideration, I will submit a further memorandum on this head hereafter.

(signed) *J. U. Champain.*

(True copies.)

F. J. Goldsmid, Lieut.-Colonel,
Superintendent Indo-European Telegraph.

From Lieutenant Colonel *F. J. Goldsmid*, Superintendent Indo-European Telegraph, to
Major *J. U. Champain*, R. E., &c. &c., India Office.

Sir,

Teheran, 24 October 1865.

THE present state of the Turkish lines, and the probability of even less efficiency in winter than in the late fine weather, induce me to address you officially on the subject of paragraph 4 of my letter to the Under Secretary of State, No. 30, of the 21st June last.* By the mail conveying the present letter I shall probably be enabled to make some definite report to the Under Secretary of State on the subject of the Convention still pending with the Persian Government than circumstances have hitherto warranted. And it is not unlikely that ere this letter reaches you, a telegram from hence will have informed you of its completion. It will rest with yourself to combine, in as effectual a manner as possible, the work of superintendence of stores required for Persia, with that of stimulating the Turkish administration of telegraphs to place their Indo-European lines in a more satisfactory state.

2. Under any circumstances, as regards the actual locality for usefulness you are better able to judge of the matter in London than I am at Teheran; and as telegraphed, I beg you will exercise your discretion. It may be that you consider your presence would be more useful in forwarding the cause at St. Petersburg than at Constantinople. In such case the Home Government would, I doubt not, communicate its decision and instructions.

3. By the mail arriving yesterday, a copy of your letter, No. 214, to the Under Secretary of State for India reached me. The subject to which it refers had already engaged my attention so far back as the 8th December last year, when I submitted an opinion in favour of a combination of interests such as you now advocate. Since that period, I have seen reason to hold these views confirmed, and have considered it a duty to urge them, both by letter and personal interview, upon the authorities. It is not so much a convention† as of coming to an open understanding with the Persian Government on the matter of telegraphic communication to India that I have pressed. In any case it has seemed to me impossible to ignore so important and palpable an alternative route (as therein) to that which we have secured by convention in Turkey. When the replies from England, lately received here, were unfavourable to direct negotiations with the Russian authorities, I adopted what appeared to be the most advisable course, viz., to anticipate results of competition likely to arise. This was done by letter to the Government of Bombay, a copy of which I long since sent to Mr. Courtenay, with a request that he would forward it to England (No. 61 of 4th September last).

* Quoted in original.

† Except perhaps as regards tariff.

4. The

4. The memorandum (No. 198A.) to which you refer in the 2d paragraph of your letter to the Under-Secretary of State, No. 214 of 31st August last, was, if I remember rightly, discussed by us on the 19th June. I may have been a few miles distant from London on the previous day (Sunday); but, whether there or not, your recorded opinion and advice could not be other than acceptable. The copy of this document which you gave me, was, I believe, sent in original with my own comments to Colonel Baker, on the 5th July from St. Petersburg. With regard to the many telegraphic messages forwarded through Russia, the fact was brought to my notice by Mr. Thornton. That gentleman made over to me a letter to his address from the secretary, Electric and International Telegraphic Company, dated 12th June. This must have been on the 13th or 14th idem. At all events, on the same day, I went to the Company's office, as also to the Submarine, and conferred with both secretaries. On the 15th, a letter from the former, in Mr. Weaver's name, stated: "On the interests of the public, I have countermanded an order to send through Russia, and until this most extraordinary matter has been cleared up, I shall send all Indian messages, as usual, *via* Turkey." On the 26th idem, he writes again: "I have entirely abandoned the use of the Persian route for the present."

I have, &c.
(signed) *F. J. Goldsmid*, Lieut.-Colonel,
Superintendent Indo-European Telegraph.

(Home Department.—Electric Telegraph.—No. 4, of 1866.)

To the Right Honourable Sir *Charles Wood*, Bart., G.C.B., Secretary of State for India;
dated Fort William, 18 January 1866.

Sir,

REFERRING to your Despatch No. 6, dated the 8th September 1865, we have the honour to forward for your information the accompanying copy of a report,* furnished by the Director General of Telegraphs, on the present state of the line between Kurrachee and Bombay, and as to the improvements that are still requisite.

* Extract from letter from Director General of Telegraphs. (No. 2183), dated 23 December 1865, and enclosure.

2. A copy of our reply† to Colonel Robinson accompanies. We have communicated a copy of the correspondence to the Government of Bombay.

† No. 531, dated January 1866.

We have, &c.
(signed) *John Lawrence.*
W. N. Mansfield.
H. S. Maine.
W. Grey.
G. N. Taylor.
W. N. Massey.
H. M. Durand.

From Lieutenant-Colonel *D. G. Robinson*, R.E., Director General of Telegraphs in India, to *E. C. Bayley*, Esq., Secretary to the Government of India (No. 2,183); dated 23 December 1865.

IN reply to Home Office (No. 3,196) of the 25th October, covering copy of the Secretary of State's (No. 6) of the 8th September 1865, and calling upon me to report "on the present state of the line between Kurrachee and Bombay, and whether any improvements are still requisite," I have the honour to submit extracts from a very interesting Report just received from Mr. B. C. Bailey, the energetic officiating director of the Western Division.

2. Mr. Bailey has certainly earned the approbation of Government for the great improvements that have been effected during the last few months in the working of the Bombay lines; but, although much has been done, there is still an immense deal more to do ere these lines can even approach that perfect state in which it is our object, not only for the interests of Government and the public, but also for the credit of the department, to bring them to.

The non-arrival of insulators and telegraph stores from England is delaying the completion of the work of repairs, reconstruction and insulation, all over India, as well as in Bombay, to a serious extent. Instead of these stores reaching India by the close of the rains, they appear never to arrive until the working season (October to April) is drawing to a close.

I regret to say that, in the present instance, the Indian Department is almost wholly to blame. The indents for stores were sent in sufficiently early, and Captain Mallock was in England to expedite them; but the specifications which were to define the characters of these stores, and which my predecessor stated it was his intention to submit very shortly after the indents, were never sent in until after Captain Mallock had returned to India, and

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brought this most vexatious fact to my notice. No time was then lost in completing these important papers, but the evil was done, and the opportunity of making the most of the best part of the working season is now irretrievably lost. The acceleration of the despatch of these stores is of such importance that I have made it the subject of a separate letter.

The following abstract shows at a glance the exact state of the lines:—

Section of Lines.	Mile.	On	Number of Wires,	Insulators.	REMARKS.
Kurrachee to Kotree -	107	Hamilton's standards	2	Bell-shaped stone-ware.	Of these one is rented from the Railway.
Kotree to Hyderabad -	3	- - Ditto - -	2	- - Ditto.	
Hyderabad to Deesa -	316	- - Ditto - -	1	- - Ditto.	
Deesa to Ahmedabad -	98	Inferior wooden posts	1	No insulation - -	In very bad condition, now in course of reconstruction.
Ahmedabad to Broach	132	Good wooden posts -	1	- - Ditto - -	Will stand till working season 1866-7.
Broach to Bulsar -	83	Hamilton's standards	2		
Bulsar to Bombay -	116	- - Ditto - -	1		
TOTAL - - -	860				

The renting of the railway wire between Kurrachee and Kotree has proved a judicious measure.

EXTRACT from LETTER from the Officiating Director of Telegraphs, Western Division, to the Officiating Director General of Telegraphs in India (No. 1,383); dated 15 November 1865.

Para. 2. The length of telegraph line between Bombay and Kurrachee is 860 miles; of which 630 miles is permanently supported on Hamilton's $\frac{3}{4}$ iron standards, and should not require more than petty repairs for the next seven years; 132 miles is on wooden posts strong enough to stand, with ordinary care, till the working season of 1866-67; and 98 miles on wooden posts scarcely strong enough to hold one wire even in dry weather. The last-named piece is now in course of reconstruction with $\frac{3}{4}$ iron standards, and will, in all probability, be completed by the end of the present working season.

Kurrachee to Hyderabad (Scind) 110*
Broach to Bulsar - - - 80

190

3. On the line above referred to, we have two wires in working order for 190 miles as per margin. On the remaining distance there is only a single wire at present, but the second wire is being suspended for 354 miles (Deesa to Broach and Bulsar to Bombay), and will be brought into use, section by section, during the next three or four months. Stores are now on the way round from Calcutta for the 316 miles gap between Hyderabad and Deesa, and immediately they arrive, the work on that part will be commenced.

Insulation.

4. There is every prospect of the second wire being opened out all the way from Bombay to Kurrachee during the present working season, but we still require a very large supply of the new pattern insulators and brackets to complete the line and ensure perfect communication at all seasons. Up to this date we have not sufficient of these stores to complete even the 120 miles section between Bombay and Bulsar. The other portions of the second wire are being nailed to the sides of the posts as a temporary arrangement for the dry weather, except in Scind where the heavy dew is found as great an obstacle to the working of uninsulated wires as the rains in other parts of the country, and consequently the second wire cannot be suspended at all between Kurrachee and Deesa (426 miles) till insulators are received.

5. The non-arrival of insulators has not only delayed the completion of the second wire, but caused serious inconvenience to the first wire, and added considerably to the work of the Line

* Of this, 107 miles (Kurrachee to Kotree) is rented from the railway company till our second wire is ready for use.

Line Officers. In April and May the second wire was suspended temporarily in expectation of the arrival of insulators before the end of the dry season, and when the rains set in both wires were brought into contact, and communication was stopped altogether till the second wire could be removed.

6. Insulators and brackets are, I am informed, expected here in December, and arrangements have been made to put them up immediately they arrive.

7. The working of the Bombay to Kurrachee line has improved gradually since May last, and for the last two months messages to and from the Indo-European line have been passed with no greater delays than those occasioned by the intermediate offices south of Deesa, disconnecting for local work, and by stoppages caused by the construction parties on the line, notwithstanding that there has been a large increase of traffic.

8. The annexed extracts from the Bombay Office, Maxima and Minima Time Interval Reports, and Cash Collection Statements for the months from April to October 1865, will show the improvement that has been made in the transmission of messages, and the increase of the traffic along the Bombay and Kurrachee line; and, I think, that I may say that a corresponding improvement has been made in all other respects,—very few complaints having been made either to the Department direct or through the newspapers.

9. These improvements have been effected—first, by renting one of the railway telegraph wires between Kurrachee and Kotree, thereby giving the Department one district line for the traffic between Kurrachee and the Punjab, and another for traffic between Kurrachee and Bombay, instead of throwing the work of two main lines on one wire; secondly, by strengthening the lines between Deesa and Bombay; thirdly, by separating the Kurrachee wire from the multiple line for nine miles at this end; and fourthly, by strengthening the signal offices, and controlling them more efficiently from the head quarters of the Division.

10. I am aware that even the present improved working is very much slower than it ought to be; but if it is considered that, on the greater portion of the line in question, there is only one wire—that five of the nine intermediate offices have a large amount of local traffic, which must of necessity interfere with the through communication, and that the signal offices are still short-handed, I think it will be admitted that a change for the better has really been made, and that we are much more likely to advance in the same direction than to revert to the bad state of affairs that existed some months ago.

11. Every section of the second wire brought into use lessens delay in the transmission of “through” messages, by relieving the main line of local traffic; and, when the whole of it is completed, I believe that the state of communication between Bombay and Kurrachee will be such as to give entire satisfaction both to the Government and to the public.

EXTRACTS from the Cash Collection Reports of the Bombay Signal Office, showing the Amount Collected for Messages to places on the Indo-European Line, during the undermentioned Months.

MONTHS.						AMOUNT.		
						<i>Rs.</i>	<i>a.</i>	<i>p.</i>
April	-	1865	-	-	-	19,575	15	9
May	-	”	-	-	-	18,035	8	3
June	-	”	-	-	-	25,320	4	3
July	-	”	-	-	-	15,494	-	6
August	-	”	-	-	-	18,595	6	-
September	-	”	-	-	-	22,337	1	3
October	-	”	-	-	-	27,281	14	3

(True Extract.)

(signed) *B. C. Bailey,*
Officiating Director of Telegraphs,
Western Division.

App. No. 2.

(Home Department.—Electric Telegraph.—No. 531.)

From *E. C. Bayley*, Esq., Secretary to the Government of India, to Lieutenant-Colonel *D. G. Robinson*, R.E., Director General of Telegraphs in India; dated Fort William, 16 January 1866.

Sir,

I AM directed to acknowledge the receipt of your letter, No. 2,183, dated the 23d ultimo submitting a report on the present state of the line between Kurrachee and Bombay, and as to the improvements that are still requisite.

2. In reply, I am directed to request that you will use every possible means to advance the work to the utmost extent during the present working season.

3. The Governor General in Council has, I am to add, full confidence in Mr. Bailey's zeal and intelligence, and sees no reason to be dissatisfied with what he has already done with the means at his disposal.

I have, &c.

(Home Department.—Electric Telegraph.—No. 532.)

From *E. C. Bayley*, Esq., Secretary to the Government of India, to *C. Gonne*, Esq., Secretary to the Government of Bombay; dated Fort William, 16 January 1866.

Sir,

I AM directed to forward, for the information of the Government of Bombay, a copy of the correspondence, noted in the margin, relative to the Kurrachee and Bombay line of Telegraph.

From Director General of Telegraphs in India (No. 2183), dated 23 December.
Enclosure of the above.
Reply to the above (No.) of this date.

I am, &c.

(No. 271.)

Major *Champain* to the Under Secretary of State for India.

Sir,

Constantinople, 26 February 1866.

I HAVE the honour to report for the information of the Right Honourable the Secretary of State that I arrived at Constantinople on the 23d instant, and reported myself on the same date to his Excellency Lord Lyons.

During the last three or four weeks the communication by telegraph both to India and to London has been surprisingly regular and prompt, messages either way scarcely ever occupying more than one day. I am, therefore inclined to take no further steps as yet, but to remain here for the present and see whether the existing satisfactory state of affairs can possibly be maintained.

I have, &c.

(signed) *W. Mill Champain*, Major, R.E.,
Indo-European Telegraph Department.

REMEDIAL ARRANGEMENTS.

(Home Department.—Electric Telegraph.—No. 1, of 1862.)

(N.B.—The last letter in this Department was No. 9, dated the 19th November 1861.)

The Right Honourable Sir *Charles Wood*, Bart., G.C.B., Secretary of State for India.

Sir,

REFERRING to your Despatch, No. 4 of 1860, dated the 8th of March, we have the honour to transmit for your information a copy of the papers noted on the margin, from which you will perceive that a revised establishment has been sanctioned for the Electric Telegraph Department, involving a considerable saving of expenditure.

Letter from Officiating Director of Telegraphs (No. 1263), dated 20 August 1861.

Resolution, Financial Department (No. 14,578), dated 10 December 1861.

We have, &c.

(signed) *Canning*,
H. B. E. Frere,
Cecil Beadon,
R. Napier,
S. Laing,
W. Ritchie.

Fort William, 15th January 1862.

From Lieutenant Colonel C. Douglas, Officiating Director General of Telegraphs in India, to A. M. Monteith, Esq., Under Secretary to the Government of India (No. 1,263), dated 20 August 1861.

IN compliance with the orders of Government in the Financial Department, No. 5,039, of the 24th April last, and in reply to your No. 926, of the 8th May, I submit a revised Schedule of the establishment of this Department, showing a total monthly net saving of Rs. 2,906. 5. 6, which takes into account the increase of 250 rupees per month lately sanctioned by the Government to the salary of the departmental compiler of accounts.

Rs. 2,906 5 6

2. It will be seen that the principal reductions have been consequent on the abolition of the grade of European artificers and the substitution of a grade of mounted Native line guards in lieu of the present foot line guards and horse patrols. As respects the former of these proposals, I consider that, as the construction of lines has as a rule ceased throughout the department, the permanent employment of Europeans on the low pay given to the men of this grade employed in the department is both unnecessary and undesirable. Their temporary employment can be had recourse to whenever extensive construction or re-construction renders the step desirable. They would in such cases be under the eye and immediate personal control of the inspector who may have charge of the construction. Their employment in independent charge of sections of lines after construction removes them from former control, and gives them the opportunity of leaving the work entirely to the Natives under them, and of increasing their pay by the large bills they make a point of sending in, and over which neither deputy superintendent nor auditor can exercise any effective check.

3. The line guards are Natives, and are employed to patrol sections of the line varying in length from eight to twelve miles. It can rarely, however, be in their power to know when an interruption occurs, except it has arisen from some such obvious cause as the breakage of the wire or the falling of its supports; and even on the occurrence of interruptions from such causes in the larger number of cases, communication is restored not by the line guards, but by peons or others, as may be available, sent out from signal offices for the purpose, who rarely find the line guards at their posts, or, when present, willing to aid in the manual labour of restoring communication.

4. The above remarks apply also to the establishment of horse patrols.

5. In the accompanying correspondence it will be seen that eight out of ten of the deputy superintendents consider that both the above classes may be dispensed with. I extract from other letters, not now sent, opinions of three of the number on the uselessness of these men. Mr. Cappel, deputy superintendent, now in Ceylon, and late in charge of the East Coast Circle, in reply to questions put to him on this subject, remarks: "I do not approve of line guards, and consider the establishment already recommended would quite provide for the wants of this circle. In all my experience I can call to mind no instance of a line guard having repaired an accident and restored communication, although I at one time gave much thought and time to endeavour to train to usefulness a body of these men."

6. Mr. Bailey, one of the oldest and most experienced of the deputy superintendents, and at present in charge of the East Coast Circle, remarks as follows:

"These patrols are of no use whatever in preventing interruption, and very few of them will do coolie's work in cases of emergency. They are, in fact, the class of men described in paragraph 5 of the Director General's Circular (No. 83), dated the 6th instant, as men who, too idle to earn their livelihood by honest labour, contrive to get attached as peons, &c., to Government offices, knowing this to be their only chance of getting good pay with the lightest possible work."

"The line of patrols, meaning the line guards, are not only not to be depended upon to repair damages, but they do not even walk regularly over their beats, although the books are passed on from station to station in good time. I have ascertained that the books are often sent on by travellers while the patrol remains in his village, and it is a common practice for the man who draws pay from the department, and who is supposed to be acquainted with his work, to put a substitute in his place for weeks together * * *; but I submit that a patrol establishment is not at all necessary. An assistant artificer stationed at each end of the line to go out on horseback during interruption, and an inspector or an artificer to make a regular monthly inspection, would keep the line in good order and provide for all emergencies."

The following are remarks by Mr. Blissett, superintendent of telegraphs, Southern Division:

"Having myself found that they (horse and foot patrols) were not available or forthcoming for the performance of duties required of them when interruption occurred, and many of this body having been discharged for such neglect of their duties on particular and pressing occasions, I endorsed the opinion expressed by Mr. Bailey, regarding their utter uselessness."

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7. The deputy superintendent of Pegu, however, considers it absolutely necessary that a small number of line guards should be appointed to patrol the portion of the line crossing the Arracan Mountains. Considering the reported difficulties of travelling over this section of the lines, and in absolute personal ignorance of the nature of the country, I have considered it prudent for the present to allow a limited number for this duty. My proposal is, with this exception, to dispense with the entire of the present establishment of foot line guards and horse patrols.

8. The tabular statement will show that I have provided for the more efficient conservancy of the lines by increasing the number and pay of inspectors, and by appointing a sufficiency of Native artificers to admit of one being stationed at every telegraph office in India, with ten additional to provide for casualties. Under the present arrangements the line guards and horse patrols are placed under the orders of the inspectors in charge of portions of line on which they are employed. By the proposed plan the new class of mounted line guards will be under the immediate orders of the assistant in charge of each office, who alone can know when an interruption occurs. They will reside at the office, and will be prepared to proceed on the line immediately an interruption becomes known; and as the average interval between offices is 70 miles, the new line guards who will be sent from each end of the line to restore communication should, under the most unfavourable circumstances, viz., that of the interruption occurring in the centre of the interrupted section, be able to do so on the day the interruption takes place, or early on the day following, should the interruption have commenced late on the previous afternoon.

9. These new line guards will simply restore communication, obtaining assistance for this purpose from the nearest village. The permanent repairs, of whatever nature they may be, will be left to the inspector in charge of the division, who, on return of the artificer to his stations, will be immediately informed by the assistant in charge of what has taken place, and the position of the accident, and the means used to restore communication by the Native artificer. The assistants in charge of offices having the entire control over these new line guards will be held responsible for the rapid restoration of communication, but not for the permanent repair of the line, which will remain, as at present, in the hands of the inspector.

10. A reduction of upwards of 1,000 rupees monthly is proposed in the establishment of office peons; the number of this class employed is in most offices disproportionate to the work to be done; they are also, in many instances, improperly employed as private servants, and are paid at a higher rate than is necessary to secure the services of men of their class.

11. I have taken advantage of the reduction of expenditure, amounting to Rs. 13,673.13.6 monthly, to propose an increase to the pay of the signallers and officers in the higher

Circles.	Miles of Line.	Persons Employed.
Punjab - - -	1,532	300
Bombay - - -	1,287	344
East Coast - -	1,180	352
Central India -	1,174	309
Madras - - -	1,030	377
Indore - - -	735	153
Seind - - -	640	172
Dacca - - -	628	220
Pegu - - -	480	148
South-east Coast -	152	20

grades. This latter part of the proposal I consider of much importance to the interests of the department. A reference to the rates of pay given in other branches of the public service to officers having duties of similar responsibility, will, I think, satisfy the Government that the remuneration of the superior officers of this department is below the average rate. The office labour and money responsibility of the deputy superintendent of a circle may be judged of from the following particulars respecting the Bengal Circle. That circle comprises 1,728 miles of line, with an establishment of 588 persons of all classes, and payments averaging monthly 39,487 rupees, and accounts current with 40 persons, involving a correspondence of 678 letters (sent and received) during the same period. The length of line, and approximately the proportionate labour and responsibility devolving on the deputy superintendent of other circles is shown in the margin. Under the existing scale of salary, the highest pay such officer can receive is 500 rupees per mensem.

The pay of the various grades below that of deputy superintendent also appears to me to require increase, especially in the lowest grade, viz., that of 3d class inspector, which includes several morse assistants, of whom the pay is 100 rupees monthly, the amount they drew on landing in India 4½ years ago. Such pay does not permit of anything being economized to meet the heavy expenses of sick furlough to England, and even scarcely permits respectable existence in India.

12. The joint effect of the indifferent prospects offered by the higher grades and of the insufficient pay of some of the lower grades has, I believe, been to deprive the department of many good men, 25 per cent of the total number of morse assistants sent out from England having already resigned, some to return home, but the greater portion to take other appointments in India, and there are others still in the department who, to my knowledge, wait a favorable opportunity for leaving it. This tendency to seek employment elsewhere would be lessened and higher efficiency secured were there a prospect for deserving men eventually to rise to a liberally paid appointment, even though the prospects of doing so were distant. The scale I have prepared will, I consider, meet this want.

13. The scheme also embraces a new nomenclature. It is proposed to style the present "Superintendents of Divisions" "Directors," and the present "Deputy Superintendents of Circles" "Superintendents." In the origin of the department, when its head was termed "Superintendent," there was fitness in calling the officers next to him in rank, and who then had

had charge of circles, "Deputy Superintendents," but since the alteration of the designation of the head of the department to that of "Director General" and the introduction of a grade intermediate, and, like the head of the department, without executive charge, these latter have become the deputies of the Director General, and I think may appropriately be termed "Directors." The officers in executive charge of circles in no respect act as deputies to the present superintendents, indeed while there are 10 of the former there are three only of the latter. I consider, therefore, that even were the designation "Superintendent" retained for the three officers in charge of divisions, that of the deputy superintendent would still be an inappropriate designation for the chief officers of circles. The former I therefore propose terming "Directors," and the latter "Superintendents." The officers next below the superintendents of circles, being their personal assistants, will be appropriately termed "Assistant Superintendents." In the grades of inspectors the nomenclature has been simplified, the term 1st class, 2nd class (A), 2nd class (B), and 3rd class, having been changed into 1st, 2nd, 3rd, and 4th classes.

14. The proposed arrangement of an assistant to every deputy superintendent is, I consider, a most important feature of my scheme. The deputy or his assistant should be at all times on the lines inspecting the various offices and the arrangements of the line officers, and I believe the present inability of the deputy superintendents to do this to be one of the chief causes of the frequent bad working of the lines. At present the time of the deputy superintendents is exclusively occupied in their offices and a hurried tour, not always once a year, over a limited portion of the lines, is the utmost they can devote to the important duty of inspection; but with the aid of an assistant, whose duty will be exclusively to assist the deputy superintendent, the latter will be able to exercise considerably more supervision over his offices than has hitherto been the case. He will then be able to acquaint himself with the character of his subordinates, check irregularities in his circle, insure a more constant vigilance over the lines, and thereby considerably lessen the chances of interruption.

15. The scale proposed gives two superintendents in excess of the number necessary to give one to each circle. One of these I propose shall be the personal assistant to the Director General, and the other the Superintendent of Stores. There are besides three extra superintendents; the duties I would propose for whom would be to fill temporary vacancies in the higher grades, to take charge of the important offices of Complaint, Fault, and Cash Collection examination, and to furnish an especial officer for construction when such is in progress, or for any other especial duties that may be required, or for any experiments the Director General may find it in the interest of the Department to make.

16. I do not propose to increase salaries immediately to the full rates suggested, thinking it better that increases should be progressive. The result will be to reduce the increase of expenditure shown in the present scale by about 2,000 rupees monthly during the present year, making the net saving accruing to Government by this proposal Rs. 4,906. 5. 6. instead of Rs. 2,906. 5. 6., as shown in paragraph 1.

17. Some explanation seems desirable respecting the manner in which I have arrived at the numbers proposed for the various grades. In this I have been to a considerable extent controlled by what I found existing. The grades of inspectors have been arranged so as to include in the 4th class all assistants in charge of offices on salaries exceeding 120 rupees a month, and all morse assistants, several of whom are, as already stated, drawing 100 rupees monthly. Again, in the grades of signallers it was, as a rule, necessary so to arrange the numbers of the grades as to bring all who might be drawing salaries intermediate between two consecutive rates into the higher of the two rates. Perhaps an example will place this in a clearer light. The 2nd and 3rd grades of pay proposed for the signalling branches are 100 rupees and 80 rupees; the grade at 100 rupees pay will comprise 30 persons, of whom 17 are now drawing 100 rupees, two 99 rupees, one 96 rupees, three 91 rupees, three 90 rupees, also two drawing 80 rupees, one drawing 79 rupees, and one drawing 76 rupees. Similarly the proposed grade on 70 rupees will also comprise 30 persons, of whom seven are now drawing 74 rupees, this being the only instance, however, of persons being included in a grade the pay of which is under what they are already receiving. In this case the excess must be continued to them as a personal allowance until their turn for promotion to a higher grade arrives. The remaining persons included in the 70 rupees grade are, 20 already drawing 70 rupees, two drawing 66 rupees, five drawing 65 rupees, two drawing 64 rupees, one drawing 61 rupees, and three drawing 60 rupees. For further particulars I refer you to the tabular statement.

18. All promotions in the higher grades of the Department consequent on the approval of this scheme should, as at present, be in the hands of Government; but to avoid the great inconvenience that has during the current year been felt on the necessity for referring to Government all minor departmental changes, I would suggest that it may be competent for the Director General to make any promotion or changes below the grade of inspectors he may consider necessary without further reference, provided that such are within the sanctioned limit, and that a copy of his departmental orders may be accepted as sufficient authority for such changes by the Audit Department.

19. I believe that further retrenchments are still practicable, especially under the head

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of "Cable Guards," and "Office Servants;" but without more satisfactory data to guide one than I have at present, I have hesitated to make the reductions I could desire.

20. The present alterations in designations have stopped short with the grade of 4th class inspectors; but I intend, in a future letter, to suggest alterations in the nomenclature of the signalling branch of the Department, and to revise the "office allowance" which in many instances admits of considerable reduction, and to propose the appointment of assistants to the present assistants in charge of offices on the same principle as the assistants to the officers in charge of circles. These assistants will be selected from the present establishment of signallers, and remunerated from the savings effected in the revision of the office allowances. This arrangement will admit of a responsible person being constantly on duty in signal offices, which, under existing circumstances, is physically impossible, the offices being open day and night throughout the year, and having but one responsible person in charge.

21. From the materials which it was necessary to collect to mature this scheme of re-organization, it will be easy to prepare lists of the establishment of various signal offices, which will be done on receipt of the Government approval, modified or otherwise, of these proposals.

N.B.—This letter supplies the information required by Government in their No. 1580 of the 20th instant, ere replying to my No. 9577 of the 25th of April last.

From *G. O'Donnell, Esq., Deputy Superintendent of Telegraphs in Pegu, to Major C. Douglas, Officiating Director General of Telegraphs in India (No. 385); dated Rangoon, 28 June 1861.*

I HAVE the honour to acknowledge the receipt of your letter, No. 116, dated 11th May, and in reply to state—

1. That, as far as my experience goes, I consider the proposed arrangement a decidedly necessary one. Under present circumstances, I find myself absolutely precluded from visiting my lines and offices, and to this day I have not been able to inspect the line to Tounghoo. I could not go to Tounghoo and back under six weeks, and perhaps not even in that time if I travelled entirely along the line. With my present office establishment, it is evident that a tour of inspection is out of the question, unless I place one of the Inspectors of Divisions in charge of the office; but by doing that I take the inspector from his legitimate work, and the division suffers from want of proper control.

2. As arrangements now exist in Pegu, there is no necessity for a deputy assistant in charge of an office. The working hours from 8 to 20 admit of the assistant himself being always present. In case the Indian arrangement of day and night work is introduced, then the appointment of one of the signallers as deputy assistant would be advisable.

	<i>Rs.</i>
* Rangoon -	50
Henzadah -	30
Menghu -	30
Prome -	30
Thayet Myo -	30
Padong -	30
Khyook Phyoo -	30
Pegu -	30
Shoaygheen -	30
Tounghoo -	30

3. The present scale* of office allowance in Pegu is sufficient for the assistants in charge, except perhaps at Prome; where, on account of the importance of the office, as a repeating station at all times, and of its being the point where three lines converge now†, and where a fourth line may yet start from‡, I would advocate that the allowance be raised to 50 rupees, on the grounds of the great responsibility of the assistant in charge, and of the greater amount of work in his office than in the others. An allowance of 10 rupees a month would be a fair inducement to a deputy assistant to do his work properly, whenever it may be necessary to introduce that grade.

4. In the Pegu Circle, after the Khyook Phyoo Division is detached from it as proposed, and when the lines to Maulmain and Amherst are finally sanctioned, there ought to be one first-class inspector and three second class. There ought also to be two third-class inspectors specially for watching and keeping up the lines across the Arracan Mountains, as that is a duty requiring more than ordinary judgment and courage, and could not be safely entrusted to natives only.

† From Calcutta.	
From Rangoon.	
From Thayet Myo.	
‡ To Tounghoo.	

§ Rangoon -	2
Henzadah -	2
Menghu -	1
Prome -	2
Thayet Myo -	1
Pegu -	2
Shoaygheen -	2
Tounghoo -	2
Sittang -	2
Maulmain -	2
Amherst -	1
	19

5. For the conservancy of the lines in Pegu, there should be 19 artificers§, and all of them might well be natives, if it were possible to procure the services of the proper class of men in this province. But this is not an easy matter. Men with the intelligence and activity required readily find much more remunerative employment in the Forest Department and with commercial firms. Such is the demand for really trustworthy and intelligent native labour, that one firm that I am acquainted with pay 80 and 100 a month to men of the class that I think our artificers should be. These are not men who can read and write English, or who even understand our language; but they are such as can be trusted to go into the district and employ labour for bringing down timber and such purposes. It must always be borne in mind that Pegu is a country where no native seeks for employment out of necessity. With a thin population, and a prolific soil, the Burmese can afford to refuse service; and they do so to an extent that can hardly be understood by anyone who has not been in the country. Here the very menials get rates of pay that would secure

secure the services of intelligent and trustworthy men in India. Cooks and sweepers are ordinarily paid 16 and 14 a month, and the people talk of rupees as they do of annas elsewhere. In fact, were it not for imported labour, I consider that all enterprise and all Government work would be brought to a dead lock. Some native artificers have been engaged, and more may perhaps be taken on by degrees, but it is hopeless to expect that an entire staff of them could be engaged at once, and I am not quite clear that East Indians might not be employed advantageously. Some of that class have done most excellent service as artificers in this province.

6. For conservancy, I anticipate no inconvenience in the abolition of the grade of European artificers so soon as an adequate staff of native artificers can be engaged; but for construction, I am satisfied that Europeans are to be preferred. Their energy, intelligence, and resource is incomparably beyond that of natives, and I have much greater confidence in the style of work that would be turned out, and in the time taken, than were only natives employed under one European Inspector. In Bengal I had once to take down and re-construct 30 miles of what was intended to be a permanent line that was put up by one of the best native artificers ever employed in the department; a man paid at the same rate as the Europeans. I do not believe in native work that is not turned out under the eye of an European; and I have known a native engineer even in the Public Works Department drawing a salary of, I think, upwards of 250 a month, permit the most infamous work to be put into bridges and public buildings under his personal superintendence. A native artificer may be entrusted to restore communication and to execute petty repairs, but I certainly do not think that he should be allowed to construct lines. Whilst on this subject, I beg to mention a proposal I made four years ago to the late Lieutenant Chauncey. It was, that one or two establishments, specially for construction duties, should be organised for all India. That the chief officer of each party should have the grade of deputy superintendent, and be subordinate only to the chief of the department, and that the subordinates of the Construction Deputy Superintendent should be all inspectors and artificers (Europeans) specially picked on account of their fitness for their work, and all unmarried. These establishments being organised, I proposed that when new lines were sanctioned, the Deputy Superintendent of the Circle should be instructed to obtain all possible information regarding locality, facilities for procuring labour, supplies, &c., and to contract for and see to the collection of materials and their distribution along the route at convenient places. Then his duties would cease, and the construction party would be sent to the scene of operations, and put up the line, handing them over to the Deputy Superintendent of the Circle when properly completed. The benefits that I considered would arise from these arrangements were, first, uniformity in the system of construction and the style of work turned out; and second, facility for an immediate fixing of establishments, by at once laying down the scale necessary for each circle, irrespective of construction requirements, which would of course be an extraordinary charge, that could be easily dealt with if kept separate in the way I indicated. Had Lieutenant Chauncey lived, I have reason to believe that he would have given my proposal a trial, but the breaking out of the mutinies deprived me of any opportunity of again bringing it forward.

7. Mr. Loneragan, who knows the line, considers that 15 patrols are absolutely necessary along the Arracan Mountains; and I am inclined to agree with him. I also think that two cable guards, with a small canoe, should be stationed at each cable; but beyond these, I do not consider that any line or cable guards are necessary. The number shown in the margin (35), would be required for the purposes I have mentioned.

8. The following is a list of the number of signallers that I think ought to be assigned to each office in the circle as it now stands, and including the assistant in charge:—

Rangoon	-	-	-	-	6	Khyook Phyoo	-	-	-	-	4
Henzadah	-	-	-	-	4	Pegu	-	-	-	-	4
Menghu	-	-	-	-	4	Shoaygheen	-	-	-	-	4
Prome	-	-	-	-	6	Toungthoo	-	-	-	-	2
Thayet Mayo	-	-	-	-	2						
Padong	-	-	-	-	4						40

Mountain Line	-	15
Padeng cable guards	6	
Prome	-	ditto - 2
Allamyo	-	ditto - 2
Sarawak	-	ditto - 2
Ya-la	-	ditto - 2
Panthu	-	ditto - 2
Alnie	-	ditto - 2
Martaban	-	ditto - 2

35

Wherever the system of night and day work is introduced, the establishment should be increased by one-half at the very least.

9. I do not advocate the employment of writers in any signal office in this Circle. They are not necessary. If the inspectors have many native artificers under them, it will in all probability be necessary to allow each inspector a native translator, who can interpret the accounts and letters he would receive, and be able to write the replies. In the Deputy Superintendent's Office the staff of clerks decidedly require to be increased. It should be—

	Rs.
1 Head Clerk on	- - - - - 100
1 Clerk on	- - - - - 75
1 Clerk on	- - - - - 50
1 Accountant on	- - - - - 100

At present the work is not at all done satisfactorily, simply in consequence of the physical impossibility

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impossibility of doing it properly with the present establishment. Each Telegraph Office and the Deputy Superintendent's Office requires—

	Rs.
1 Sweeper - - - - -	10
1 Bheesty - - - - -	10
2 Chuprassies at 10 each - - - - -	20

The Promotee office requires one chuprassie above the usual number, and Rangoon office requires two above that number, or four in all. The Deputy Superintendent's Office also needs the services of an orderly peon on 12 rupees, who can be entrusted to draw money from the Treasury, and sent with cash to a distance. One punkah man, a godown sirkar, and two godown lascars are needed at the head quarters of the circle.

10. I would beg to point out, that even the designation of the officer in charge of the circle is faulty and inconvenient. He should be called the "superintendent" of such a circle of telegraphs. It is most usual for the public to address him by that title, and the addition of the word "deputy" almost implies a local superior to him; at least I find it does so in practice. When the chief of the department was termed the "superintendent," the officers in charge of circles were then naturally enough designated "deputies." But now I submit that the latter should be termed superintendents, and the officers in charge of the three great divisions might be called say "chief superintendents," as there could be no fear of that title being in any way mistaken for that of the Director General. By this arrangement the present Assistant Deputy Superintendents would become Deputies only, and so the titles of the officers of the department would be so far simplified.

I fail to see any advantage in multiplying the rates of pay in the signal branch. Doing so is sure to complicate the accounts and returns of the department, and I do not think that the signallers generally would care to have the old arrangement, as introduced by Sir William O'Shaughnessy in Bengal and the North-Western Provinces, altered. That arrangement was—

	Rs.
1st Class Signaller - - - - -	100
2nd Class Signaller - - - - -	75
3rd Class Signaller - - - - -	50
4th Class Signaller - - - - -	30

So long as the work of the department is done efficiently, I should certainly deprecate any arrangement that would make it more complicated than it is; and I know that in this circle promotions carrying with them five rupees or so additional pay are not appreciated. I certainly advocate that the establishment in each circle should be a "fixed" one; but I submit that in the "signalling branch" promotions should be not according to a departmental list, but according to a circle list. I know the feeling is very general against the departmental seniority list as regards the "signallers," but as respects the inspectors and higher officers, it is, of course, the only practicable arrangement. I would therefore beg to propose, that there be a fixed establishment assigned to each circle, and that all vacancies that occur in the signal branch of circles be filled up by promotions in the circle only. I am sure that this would give much greater satisfaction than any other arrangement.

Respecting the designation of the officer in charge of a telegraph station, I should be very indisposed to propose an alteration in the present title, as I think that by a steady persistence in it, and a little attention to the means of bringing before the public the fact that such is the proper official designation of the officer, would, in time, result in its universal adoption. The title of "assistant in charge" may certainly not be very explanatory, but it is euphonious, which "telegraph master" is not. In case it is desirable to make the title really carry its meaning with it, I would propose that it be "telegraph station master," which is both euphonious and explanatory—the only objection being that it is so long.

From *B. C. Bailey*, Esq., Deputy Superintendent, Telegraph, East Coast Circle, to Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India (No. —); dated 18 May 1861.

I HAVE the honour to reply as follows to your Circular, No. —, dated May, 1861:—

1. An Assistant Deputy Superintendent shall be appointed to every circle, to relieve the Deputy Superintendent of some of the office work, and to enable him to make periodical inspections of the lines and offices.

2. A Deputy Assistant is greatly required in every office in which there is any local work, or which is liable to be called upon to repeat messages. At "look-out" stations, such as Jellalore, Burkool, Ongole, and Puttoocottah, a deputy assistant is not necessary.

3. I think

3. I think the present office allowances sufficient for the assistants in charge. The deputy assistant's allowance might, as a general rule, be fixed at one-half of the amount allowed the assistant.

4. One 1st class inspector to every 500 or 600 miles of line, and one 2nd or 3rd class inspector to every 100 miles.

5. Two well-trained native artificers, or one native artificer and one mistry, on from 15 to 25 rupees a month each, are required for each section of 100 miles of line.

6. The salaries allowed for European artificers are not high enough to secure good men, and, consequently, few of the European and East Indian artificers now on our list are up to their work. I would, therefore, recommend that that grade be abolished, and that 3rd class inspectors be made the lowest grade for Europeans employed on the line.

7. Line guards are not required on permanent lines, but on temporary lines I would post one to every 10 or 12 miles. Tindals, lascars, &c., are required only for construction work, and should not be allowed on the fixed establishment. It is necessary for the conservancy of the lines that the inspector should go along his section and report upon it regularly once a month, and that the native artificers should be stationed one at each end to go out during interruptions. The native artificers should be placed under the orders of the assistant in charge of the offices, and should be compelled either to live on the premises or to attend the office daily from sunrise to sunset. Every native artificer or mistry so employed should be allowed 15 or 16 rupees a month for the keep of a horse.

8. For the efficient working, at all seasons, of the offices of the East Coast Circle, 65 signallers are required, as per annexed list, to do all the office work without the assistance of writers, except one at Vizagapatam.

9. Except at 1st class repeating offices, such as Benares, Agra, and Vizagapatam, where there is much local work, writers are not required. Office servants are required as follows, namely—

1 Bearer, to prepare batteries, clean lamps and furniture, &c.; pay, from 5 to 6 rupees per month.

1 Waterman, from 1.8. to 5 rupees per month.

1 Sweeper, from 1.8. to 5 rupees per month.

Peons according to the number of messages and the distance they have to be conveyed; pay, head peons 6 rupees, others 5 rupees.

10. I would suggest the following classification :

Deputy superintendent.

Assistant deputy superintendent.

1st, 2nd, and 3rd class Inspectors.

Signal Branch.—To be divided into four groups, as per circular under reply. The first to be "assistant;" the second, 1st class signaller; the third, 2nd class signaller; and the fourth, probationers. I think the best designation for the head of an office would be "Assistant in charge," and for his deputy, "head signaller."

STATEMENT of the Number of Signallers required for the Offices of the East Coast Circle.

OFFICE.	Number of Instruments Working.	Whether a Repeating Station.	Number of Signallers Required.	REMARKS.
Midnapore - -	3	At times -	5	Will be closed next month.
Jellalore - - -	4	No - -	3	
Balasore - - -	3	At times -	5	
Cuttack - - -	2	Yes - -	5	
Burkool - - -	2	No - -	2	Will be closed in June or July.
Berhampore - -	2	Yes - -	5	
Chicacole - - -	3	At times -	4	
Vizagapatam - -	3	Yes - -	7	
Bimlipatam - -	2	No - -	3	Much local work.
Vizianagram - -	1	No - -	2	
Dowlaiswaram -	3	At times -	4	
Coconada - - -	1	No - -	3	
Beizwarah - - -	4	Yes - -	8	Very much local work—collection 800 rupees a month.
Masulipatam - -	1	No - -	2	
Ongole - - -	2	No - -	2	
Nellore - - -	2	At times -	5	
			65	

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From *H. Wickham*, Esq., Deputy Superintendent, Telegraph Department, Bombay, to Major *C. Douglas*, Officiating Director General of Telegraphs in India, Calcutta (No. —); dated 21 May 1861.

I HAVE the honour to acknowledge the receipt of your letter (No. 90) of the 11th instant, and, in compliance with the request therein, beg respectfully to offer the following suggestions:—

1. One deputy and one assistant deputy superintendent should, as now, be employed in this circle. The assistant deputy has charge of the Guzerat division, while the deputy superintendent's time is so fully occupied with the accounts and correspondence of his circle as to almost preclude the possibility of paying attention to the state of his lines, and his information is principally gained from the inspectors. I would, therefore, beg to suggest that the assistant deputy should at times attend the Bombay office to enable the deputy to inspect his lines and offices as soon after the monsoon as practicable, so that any alterations or repairs he may deem advisable for the efficient working of the circle may be completed during the working season. The assistant deputy could carry on correspondence and letters of more than ordinary importance, and bills could be forwarded for deputy's information and opinion.

2. It would be, in my opinion, a great improvement, and materially add to the efficiency of the working of offices if the more important offices were to have two assistants attached to them. The assistant in charge cannot be at all times present in the office; but with two officers there would be no excuse whatever for delays, errors, or absence from office; at the same time all matters of importance could be referred to the head assistant, who should be always present on the receipt of the mail news.

3. The principal offices in the Bombay Circle are, Bombay, Belgaum, and Ahmedabad. I would respectfully suggest that the allowance of the Bombay office be equal to that of Calcutta, there being an equality if not an increase of the work, being 75 and 50; Belgaum 50 and 25; Ahmedabad 50 and 25. Poona also has much work during the monsoon, when the Government offices are removed from Bombay, when it is necessary to have two assistants from June to October, both inclusive. The other offices are of minor importance, and one-third of the office allowance might be given to the 2nd assistant; at the same time the rule should, I would suggest, be that none should be placed in charge of an office except those who have served as 2nd assistant.

4. The number of inspectors—I would beg respectfully to suggest that there be two 1st class inspectors attached to this circle. One to have charge of the lines from the Madras frontier to Sattara, including the line to Goa, 255 miles. One from Sattara to Bombay, including Mahableshwar, Ahmednuggur, and Matheran, 279 miles. Second class inspector—one from Callian to Bulsar. This line is one where sickness is prevalent, no regular road, and during the monsoon is a swampy marsh. Two to be placed on the Guzerat division. European artificers two; one on the Goa line, one on the Bulsar line. Native artificers suffice for line duty. The reason I would suggest two European artificers is, that they may be in training and conversant with the duties in case of a vacancy occurring among the inspectors. A native artificer should be allotted to each office, and in case of an interruption between two stations, one party should be dispatched from each office, and patrol the line until he meet the other party, even although they may have repaired a portion of the line. I would also beg to suggest, that every artificer and inspector should make himself conversant with the use of the testing instrument, that he may make his wants known when repairing an interruption; thus 16 native artificers would be required in this circle, and doing away with the line guards.

5. The only inconvenience which might arise by doing away with European artificers is, a newly appointed inspector would not be conversant with his duties, and in case of an outbreak we should place ourselves too much in the power of natives.

6. This has already been alluded to in No. 4.

7. The number of signallers necessary for the efficient working of the offices:

Ahmednugger Needle	1 Assistant	-	-	-	2 Signallers.
Ahmedabad	1 ditto	-	1 Deputy	-	6 ditto.
Bombay	1 ditto	-	1 Deputy	-	12 ditto } Main Branch Office
Belgaum	1 ditto	-	1 Deputy	-	12 ditto } to Goa.
Bulsar	1 ditto	-	-	-	4 ditto.
Baroda	1 ditto	-	-	-	5 ditto.
Broach	1 ditto	-	-	-	5 ditto.
Dharwar	1 ditto	-	-	-	5 ditto.
Deesa	1 ditto	-	-	-	4 ditto.
Gudduck	1 ditto	-	-	-	4 ditto, during the monsoon.
Kolapore	1 ditto	-	-	-	5 ditto.
Poona	1 ditto	-	1 Deputy	-	5 ditto.
Surat	1 ditto	-	-	-	6 ditto.
Sattara	1 ditto	-	1 Deputy	-	6 ditto.
Mahableshwar	1 ditto	-	-	-	2 ditto.
Vingorla	1 ditto	-	-	-	2 ditto.
Goa	1 ditto	-	-	-	2 ditto.
Governor's Office	1 ditto	-	-	-	2 ditto.

Some of these might be probationers, but I consider this number necessary, so that there shall be no excuse from sickness, which is of frequent occurrence, leaving the few who work the office tired and worn out.

I would suggest that four writers be employed in the Bombay office, none other are required for copying messages; and four, as at present, in the Receiving Office.

Each office requires $\left\{ \begin{array}{l} 1 \text{ Hamal} \\ 1 \text{ Sweeper} \\ 1 \text{ Bheesty} \end{array} \right\}$ Except Bombay office, which requires two sweepers.

Line guards will be required for the present on the Bulsar line, and from Baroda to Broach, as horses cannot travel along this route in the monsoon, but can be dispensed with after the monsoon.

I would also beg to suggest that the office and line be distinct branches of the department. The plan laid down in your letter, averaging from 120 to 20, is, I think, liberal enough to obtain respectable hands.

I would suggest the terms of office assistants be:

Assistant - - - Office inspector or signal inspector.
Deputy assistant - - Deputy D. or assistant, deputy D. assistant.
1st class signallers.
2nd ditto ditto.
1st class probationers.
2nd ditto ditto.

Letters might be addressed to the officer in charge of the Signal Department or Office.

From *M. K. Man*, Esq., Officiating Deputy Superintendent, Telegraphs, Indore Circle, to Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India (No. 197); dated 10 June 1861.

I HAVE NOW the honour to reply to your Letter (No. 95) asking for my confidential opinion on points connected with the re-organization of the department.

Assistant Deputy Superintendent.—I am quite of an opinion that there should be an officer of this rank in every circle, on whom the responsibility of its working should devolve during the absence of the deputy superintendent from his head-quarters on inspection or other duty. At present, while away, his office work falls into arrears, and he is unable to devote that time to the lines and the state of distant offices which their importance require. As a rule, the senior first class inspector of the circle should be appointed to this post, unless either from a deficient education or other causes he may be unfitted for it; and while carrying out, as far as possible, the system of promotion by seniority, it must not be overlooked that the department is composed of such a mixed body that many of our oldest hands are not fit for other duty than that they are at present called upon to perform; as an instance, the senior signaller in the Indore Circle cannot be trusted with the care of an instrument.

Deputy Assistants.—Referring to paragraph 2, I think divided responsibility decidedly objectionable, and therefore do not recommend the appointment of "deputy assistants," or, as you propose to designate them, "deputy telegraph masters." In every office there should be two head signallers, one in charge of each watch; they should receive higher pay than any of the signallers (at present some head signallers receive less than signallers placed under them), and the assistants should hold the head signallers responsible for the work of the office during their absence; but I do not think it advisable to recognise that division of responsibility by appointing "deputy assistants." I have invariably adopted the above plan, and found it work well.

I consider the present amount allowed for the charge of offices in this circle ample; but am confident that if assistants had a chance of being promoted from an office to the line as inspectors, it would have the effect of making them more zealous in the performance of their duties and more anxious to obtain the good opinion of their deputy superintendent. At present a young man obtains the charge of an office, and feels that he has very little chance of rising higher; the natural consequence of which is, that he cares only about performing his duties sufficiently well to retain that charge.

Indore Circle requires the services of two first-class inspectors (or one assistant deputy superintendent and one first-class inspector), one second-class inspector, and one third-class inspector.

I have always advocated the abolishing the rank of artificer, as the pay is not sufficient to secure the services of good men, and my experience proves that the same work is performed much better by natives (who should, however, be able to read and write). I believe respectable men of this class can, in most places, be obtained for 20 rupees per month, and horse allowance. I would suggest that there be two grades of native artificers. First grade at 30 rupees, and 2nd 20 rupees; and would for this circle would ask for six, three of each grade, which being granted, would enable me to dismiss nearly all the line guards and

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sowars at present employed, which, however, is only half the number I found on taking charge from Mr. Todhunter.

I annex a statement of the staff I consider should be permanently retained at each office, together with the number and pay of office servants and others.

I do not feel at all certain that the present classification of the various grades in the department can be much improved with the exception of the signallers, who should be divided into two or three or four distinct classes, each class having its fixed rate of pay, and I consider the rate proposed by you liberal enough to secure respectable boys; the same may also be said of probationers, excepting that instead of increasing at the monthly rate of five rupees, I think 10 would have the effect of urging a lad to exert himself, while five might not have that effect. From 60 rupees, I would suggest that each promotion carry with it an increase of 15 rupees per month, until the highest rate of 120 rupees is attained. I think it would be advisable to distinguish the separate grades as head signallers, first and second class signallers, first, second, and third class; and also three classes of probationers.

I believe the term "assistants in charge" has been in use ever since the department has been in existence, and yet it appears that the public do not understand that it is to him they are to address messages for despatch, and I must respectfully state that I do not see any reason to suppose they would understand any better the designation of "telegraph masters," which I believe they would understand to mean the deputy superintendent.

There are yet two points to which I feel I should allude—and your having asked my confidential opinion enables me to do so—

First. It is an undeniable fact that we do not succeed in obtaining many of the respectable portion of the boys of India, although the pay is very considerably higher than can be obtained anywhere else, and I attribute this to the frequent changes which are made in the rules of the department, to there having hitherto been no regular system of promotion, and to the very slight chance there is for even an educated lad to reach any of the higher grades. If parents are once convinced that a lad by industry and general good conduct has a chance of becoming an inspector and of gradually ascending, I am sure we shall no longer be pushed for hands, and compelled to retain the useless trash we have on the establishment.

Secondly. A comparison of the pay of all the higher grades of this department with that of any other in the service will at once prove how inadequately its officers are remunerated for the responsible and extremely harassing duties they have to perform, and I venture to hope, while submitting your plan for the re-organization of the department, you will bring this fact to the notice of Government. Unlike officials of other departments, they are most exposed during the rainy seasons, and, from the peculiar nature of their duties, they are never free from the cares and anxieties of office.

Of the Gresham House class how few are now left, and the fact of so many having been obliged to return to England on medical certificate proves how injurious the constant exposure and continued strain on the mind acts on the health.

In conclusion, I respectfully hope you will not think I have brought forward my own ideas in too strong a manner, and that you will believe I am solely prompted by a desire to see this most important department assume its proper position and work efficiently.

From J. T. Blissett, Esq., Deputy Superintendent of Telegraphs, Madras Circle, to Lieutenant-Colonel C. Douglas, Officiating Director General of Telegraphs in India (No. 232); dated Madras, 22 June 1861.

WITH reference to your letter (No. 89), dated the 11th ultimo, calling for my opinion confidentially on the points therein adverted to, in order to enable you to prepare a schedule called for by Government, having in view the fixing, on a permanent scale, of the establishment for this department, I have the honor to state as follows:—

2. With regard to the first point, namely, the appointment of an assistant deputy superintendent to each deputy superintendent, with a view to relieve the latter of much of the drudgery of office work, and thus afford him more time to devote to his lines, I beg to state that the necessity for appointing an assistant deputy superintendent does not appear to me to be sufficiently great, in the case of every circle, to justify the appointment generally. In small circles the deputy superintendent must always be able to inspect his offices and lines once a year, and this would be sufficient to keep him thoroughly acquainted with their working and condition, while, during the absence of the deputy superintendent, a competent 1st class inspector might be appointed to take charge of his office, and to communicate with the deputy superintendent as often as occasion may require. On the other hand, in circles of great extent, an assistant deputy superintendent must be of great use in checking and controlling the work of the offices and lines, some portion of which might be placed in his separate charge and responsibility for their correct working and efficiency. The assistant deputy superintendent might be placed at one extremity of the circle to check the offices and lines thus placed under his separate charge and responsibility, while the deputy superintendent remains at head quarters; but whenever the latter proceeds on a tour of inspection, the

the assistant deputy superintendent should move to head quarters, inspecting lines and offices en route (reporting the result to the deputy superintendent), and remain in charge of the deputy superintendent's office until the return of the deputy superintendent, when the assistant deputy superintendent should resume the duties connected with the offices and lines placed under his immediate superintendence. As far as office work is concerned, it is unnecessary that both the deputy and assistant deputy superintendent should be at head quarters at one and the same time. The deputy superintendent could easily perform and conduct all office work while at head quarters without the assistant deputy superintendent, whose assistance could only be needed during the absence of the deputy superintendent from head quarters.

3. The next point is the advisability of appointing a deputy assistant in each office to ensure the presence of either the assistant or his deputy constantly in the signal room. On this point I beg to state that I cannot perceive that much benefit will result by creating the appointment of deputy assistants to aid the assistants. One would certainly relieve the other during meals, or whenever either had occasion to absent himself from office; but beyond this there would be no advantage in the appointment. An efficient head signaller might be entrusted with the duties proposed to be assigned to the deputy assistant. I do not think it advisable that there should be much divided authority, for in cases of complaint there might be difficulty in fixing the responsibility upon the proper party, besides which, the appointment of an additional assistant to each office may tend to encourage more frequent absence on the part of both without any actual necessity.

4. In regard to the 3rd point, namely, the amount of office allowance for the assistant and his deputy, which I consider would be a sufficient inducement to assistants and others to hold such appointments, it appears to me that, considering the duties and responsibility of the assistants, the allowance in question may be fixed at 50 rupees per month for the most important offices, decreasing the allowance by tens in the case of those less important, with the exception of the office at the Presidency, where the allowance may be fixed at the higher rate of 75 rupees per month, in consideration of the greater amount of labour and local correspondence inseparable from it.

5. As to the 4th point, namely, the number and grades of inspectors which I consider necessary for the conservancy of the lines of my Circle, I beg to state that I am in favour of the measure of reorganising its present line establishment in the following manner:—The Madras Circle consists of about 1,030 miles, and I propose to divide this distance into two great divisions, and to appoint one inspector of the 1st class to each of these divisions, it being their duty to make periodical inspection of the lines, to adopt the necessary measures for their preservation, and to check any irregularity or neglect on the part of the subordinates employed therein, scrutinising their accounts at the same time, and satisfying themselves that the cash balances exhibited in their accounts are actually in their possession. Again, these two great divisions, I propose, should be subdivided into five divisions, and one 2nd class inspector of the 2nd grade appointed to each of these subdivisions, with the immediate charge of about 200 miles of line. Their duty will be to inspect regularly the portion of line assigned to them, to keep the same in efficient working order, and to submit to this office monthly pay bills of the entire establishment employed within their portion of line, as well as the accounts and other periodical returns which may be required. For the purpose of securing to the utmost extent possible the conservancy of the lines, I would further propose that these five subdivisions be divided into sections of 40 or 50 miles each, and placed under the immediate charge of an artificer, whose business it will be to attend personally to the repairs of the lines under instructions from the inspectors in charge of the subdivisions, to whom he will report weekly the work performed by himself and his establishment, which will consist of three working Lascars.

6. Under the arrangement above proposed, the following staff of inspectors and artificers will be required for line duty:—

- 2 First class inspectors.
- 5 Second class inspectors of the second grade.
- 20 Artificers.

7. With regard to the 5th and 6th points, namely, the number of artificers I consider necessary, stating whether Native or European, and whether, in my opinion, any inconvenience would result from abolishing entirely the grade of European artificers, I beg to state that the number of artificers required is given in the preceding paragraph. With regard to abolishing entirely the grade of European artificers, the question is one of great importance, and respecting which I cannot express any decided opinion at present. Time alone can determine the question, after giving exclusive native agency in this branch of the department a full and fair trial. Should you finally determine to do away with the grade of European artificers, it occurs to me that it would be very advisable to retain the services of a few of the best European and East Indian artificers on the main lines of communication. Apart from the consideration that these lines should be kept in the best working order, the presence of European or East Indian artificers appears to me very desirable, if not actually necessary, inasmuch as they can temporarily supply the place of the inspectors in charge of the subdivisions, in the event of the absence of the latter caused by sickness, or other unavoidable circumstances, and whose duties cannot safely be entrusted to native artificers.

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8. The next or 7th point noticed in your letter is the number of line guards and patrols which I consider necessary, and whether they might not be entirely dispensed with by having native artificers at every office. I concur in your opinion that the desirability of entertaining line guards and patrols is very doubtful if the lines are efficiently controlled by the inspectors and others. It may be sufficient, perhaps, for additional security to have one native patrol stationed at each office, to start immediately on the occurrence of an interruption, and give notice to the working party on the line.

9. In respect to the 8th and 9th points, namely, the number of signallers I consider necessary for the efficient working of my offices, detailing these separately, and giving the number of signallers necessary for each, and the same with regard to writers and office servants, and their scale of pay, I beg to forward two lists containing the information called for. The establishments shown in these lists are absolutely necessary for the efficient working of this Circle.

10. The 10th and last point referred to in your letter is a convenient classification of the various grades of the department, and on this point it only remains for me to state that I have already adverted in this Report to the classification necessary, as regards the line establishment, and your classification as regards the signal branch is the best, in my opinion, that could have been devised.

11. In conclusion, I may observe that the same inconvenience complained of by you, regarding the different designations given by the public to the officers in charge of the signal offices, has been experienced in the offices within the Madras Circle, and the designation you propose, namely, "telegraph masters," appears to me perfectly appropriate.

GOVERNMENT TELEGRAPH DEPARTMENT.

Establishment for Deputy Superintendent's Office, Madras Circle.

		<i>Rs. a. p.</i>	<i>Rs. a. p.</i>
1	Office Assistant - - - - -	100 - -	
1	Accountant - - - - -	75 - -	
1	Assistant Accountant - - - - -	40 - -	
1	Head Clerk - - - - -	75 - -	
1	Record Keeper - - - - -	55 - -	
1	Storekeeper - - - - -	35 - -	
1	Clerk - - - - -	50 - -	
2	Clerks at 40 rupees each - - - - -	80 - -	
1	Clerk - - - - -	25 - -	
1	Ditto - - - - -	20 - -	
1	Moochy - - - - -	10 - -	
1	Ditto - - - - -	8 - -	
1	Attender - - - - -	10 - -	
1	Duffadar - - - - -	10 - -	
6	Peons at 7 rupees each - - - - -	42 - -	
	<i>Printing Office.</i>		635 - -
1	Foreman - - - - -	45 - -	
1	Compositor - - - - -	14 - -	
1	Ditto - - - - -	8 - -	
1	Ditto - - - - -	7 - -	
1	Pressman - - - - -	10 - -	
1	Ditto - - - - -	8 - -	
1	Baller - - - - -	7 - -	
1	Ditto - - - - -	6 - -	
1	Peon - - - - -	6 - -	
			111 - -
	TOTAL - - - Rs.		746 - -

Deputy Superintendent's Office,
Madras, 22 June 1861.

(signed) *J. T. Blissett,*
Deputy Superintendent of Telegraphs,
Madras Circle.

GOVERNMENT TELEGRAPH DEPARTMENT.

Establishment for Signal Offices in the Madras Circle.

Madras Signal Office	Inspector or Assistant	1	Ootacamund Signal Office.	Inspector or Assistant	1
	Head Signaller	1		Head Signaller	1
	Signallers - - -	12*		Signallers - - -	2
	Head Clerk - - -	1		Peons - - -	3
	Clerks - - -	8		Sweeper - - -	1
	Lithographers (for printing shipping notices)	32		Assistant - - -	1
	Duffadar - - -	1		Head Signaller	1
	Peons - - -	0		Signallers - - -	3
	Lascars - - -	2		Peon - - -	1
	Waterman - - -	1		Puckally - - -	1
Mount Signal Office	Sweeper - - -	1	Mercara Signal Office	Sweeper - - -	1
	Scavenger - - -	1		Assistant - - -	1
	Assistant - - -	1		Head Signaller	1
	Head Signaller	1		Signallers - - -	3
	Signallers - - -	2		Peons - - -	2
Vellore Signal Office	Peons - - -	2	Cannanore Signal Office	Sweeper - - -	1
	Sweeper - - -	1		Scavenger - - -	1
	Scavenger - - -	1		Assistant - - -	1
	Assistant - - -	1		Head Signaller	1
	Head Signaller	1		Signallers - - -	3
Bangalore Signal Office	Signallers - - -	3	Calicut Signal Office	Clerk - - -	1
	Peons - - -	2		Peons - - -	2
	Sweeper - - -	1		Sweeper - - -	1
	Scavenger - - -	1		Assistant - - -	1
	Assistant - - -	1		Head Signaller	1
Seerah Signal Office	Head Signaller	1	Cochin Signal Office	Signallers - - -	2
	Signallers - - -	2		Clerk - - -	1
	Peon - - -	1		Peons - - -	3
	Sweeper - - -	1		Sweeper - - -	1
	Assistant - - -	1		Assistant - - -	1
Bellary Signal Office	Head Signaller	1	Pondicherry Signal Office	Head Signaller	1
	Signallers - - -	8		Signallers - - -	4
	Clerk - - -	1		Clerk - - -	1
	Peons - - -	3		Peons - - -	4
	Sweeper - - -	1		Sweeper - - -	1
Mysore Signal Office	Scavenger - - -	1	Karical Signal Office	Scavenger - - -	1
	Assistant - - -	1		Assistant - - -	1
	Head Signaller	1		Head Signaller	1
	Signallers - - -	5		Signallers - - -	2
	Clerk - - -	1		Peon - - -	1
Negapatam Signal Office	Peon - - -	1	Negapatam Signal Office	Sweeper - - -	1
	Sweeper - - -	1		Scavenger - - -	1
	Puckally - - -	1		Assistant - - -	1
	Scavenger - - -	1		Head Signaller	1
	Assistant - - -	1		Signallers - - -	5

* Inclusive of one detached to attend to the time ball, and one for replacing any that may be sick.

Deputy Superintendent's Office,
Madras, 22 June 1861.

(signed) J. T. Blissett,
Deputy Superintendent of Telegraphs,
Madras Circle.

App. No. 2.

From *A. J. N. Cappel, Esq.*, Deputy Superintendent of Telegraphs, South-East Coast Circle and Ceylon, to *Colonel C. Douglas*, Director General of Telegraphs in India (No. 310); dated Colombo, 7 June 1861.

I HAVE the honour to reply to your No. 91, dated 11th ultimo, calling for an expression of opinion on various points connected with the remodelling of the permanent establishment of the Department.

1. I think the appointment of an assistant deputy superintendent to each Circle a measure of exceeding utility. In my own case I have felt the want of a really competent assistant, one in whom I could place confidence, and who, during my necessary absences, could continue the work of the office. I was compelled lately to proceed overland to Trincomallee, to examine the road and report on the proposed extension of the telegraph line to that place. I was unavoidably detained some time en route, and on my return was attacked with fever and liver, which rendered my attention to duty impossible for upwards of a week. Under these circumstances the services of an assistant would have been most valuable, as I can place no reliance on my clerks, nor on the inspector at Colombo for the performance of even routine work.

2. The appointment of a deputy to the officer in charge of all large offices, with the object stated, would, in my opinion, be very advisable. It must be a matter for your consideration only, whether in small offices, where the expenditure is already out of all proportion to the receipts, such an addition would be expedient.

3. I would not recommend any office allowance for the deputies, as by the establishment of a graduated scale of each class of office people a certainty of promotion would be held out to them in the event of unexceptionable conduct. In some of the larger offices it may be necessary that both the officer in charge, and his deputy, should be of the first class, in which case the office allowance alone would mark the difference between the two. I think, also, that a too great similarity in point of emolument is likely to lead to ill-feeling and insubordination.

4. For the South Coast Circle I consider two inspectors sufficient, and those of the second or third grade.

5. I consider four artificers necessary for this Circle; two already employed have given satisfaction, but they are discontented with their position, and one (an European), if not promoted within a reasonable time will, in all probability, resign. It is my idea that the usefulness of these men has been secured by allowing them no mistries, nor tindals, nor working natives of any kind to whom they could entrust the performance of their own duties. As a general rule, I have but little faith in artificers either European or native, but one has proved himself so very intelligent that I should not like to lose him. Should his promotion to an inspector of the third grade be permitted, three native artificers, or overseers, provided with horses, would meet all the requirements of the Circle.

6. I beg to express entire concurrence with your remark that neither respectable Europeans nor East Indians can be obtained for the pay offered. If such enter the service, it is with the confident hope of speedy promotion, and, if this be not obtained, they leave in disgust. Those who are content with their position of artificers are generally worthless.

7. I do not approve of line guards, and consider the establishment already recommended* would quite provide for the wants of this Circle. In all my experience I can call to mind no instance of a line guard having repaired an accident and restored communication, although I, at one time, gave much thought and time to the endeavour to train to usefulness a body of these men.

8. The following is the minimum number of signallers necessary for each office:—

<i>Paumben.</i>	<i>Tuticorin.</i>	<i>Puttoocottah.</i>
1 Officer in charge.	1 Officer in charge.	1 Officer in charge.
6 Signallers.	3 Signallers.	2 Signallers.

PRESENT ESTABLISHMENT AND COST.

<i>Paumben.</i>	<i>Rs.</i>	<i>Tuticorin.</i>	<i>Rs.</i>	<i>Puttoocottah.</i>	<i>Rs.</i>
1 Assistant in charge	- 130	1 Head signaller -	- 80	1 Head signaller, sick, half-pay.	20
5 Signallers	- 165	2 Signallers	- 100	1 Signaller in charge	41
				1 Signaller	30
<i>Rs.</i>	295	<i>Rs.</i>	180	<i>Rs.</i>	91
			TOTAL - - <i>Rs.</i> 566		

9. Writers have been discontinued in all offices, and I do not think it necessary to revive the appointment. The following is a list of the office servants now employed:—

<i>Paumben.</i>	<i>Rs.</i>
2 Peons, at 6 Rupees	= 12
1 Sweeper, at 3 „	= 3
	15

Tuticorin.

* Viz., 2 Inspectors, 2nd or 3rd grade; 1 artificer; to be promoted to Inspector 3rd grade; and Mounted Native Artificers or Overseers.

	<i>Tuticorin.</i>	<i>Rs.</i>
2 Peons at 6 Rupees - - - - -	=	12
1 Sweeper at 3 „ - - - - -	=	3
		15
	<i>Puttoocottah.</i>	
1 Peon - - - - -	-	6
1 Sweeper - - - - -	-	3
1 Waterman - - - - -	-	3
		12
TOTAL Rs. per Mensem - - -		42

10. I do not feel competent to offer an opinion on this subject. I am well aware of the unsuitableness of the present official designation of the officers in charge of telegraph offices, and I have witnessed the difficulty evidently felt by the public in addressing the assistant in charge of an office.

In England, I believe, messages for dispatch are forwarded to a telegraph office with that superscription only, and letters of inquiry, &c., are addressed to the Superintendent Electric Telegraph Office. This appears to be the general and favourite form of address, and in Ceylon I have noticed that, in nine cases out of ten, Superintendent is the word made use of in writing to the assistant or inspector in charge of an office. If some other designation could be found for the superintendents and deputy superintendents of the department, it might perhaps be as well to allow the name Superintendent to be applied to those in charge of offices.

Before concluding I would beg to call your attention to the fact, that an assistant in charge of an office (however important the duties of that office may be), has hitherto held an inferior departmental position to the lowest line inspector in the service. I consider the successful management of an office of any magnitude requires a greater amount of intelligence and application than is looked for from any line inspector, except of the highest grade.

With reference to my reply to No. 1 of your inquiries, I have the honour to state that the Ceylon Government will, I feel sure, object to any additional charge on that or any other account.

From *H. J. Walton*, Esq., Officiating Deputy Superintendent, Government Telegraphs, Bengal, to Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, (No. 111); dated 16 May 1861.

I HAVE the honour to reply to your No. 95, dated 11th May, noticing each point seriatim as requested.

1st.—The necessity of appointing an assistant deputy superintendent to each deputy superintendent is self-evident. The deputy superintendent of a Circle is at present so confined to his office that he cannot properly control the offices and lines under him without neglecting the current duties of his own office. The assistant deputy would also thus have an opportunity of learning his duties as a deputy superintendent, for under the present system a man is suddenly placed in charge of a Circle and an extensive office without the slightest previous knowledge of the heavy and responsible duties attached to it. I would suggest that the deputy superintendents should nominate their own assistant deputy superintendents for the approval of the director general, in order to avoid the possibility of the deputy superintendent being obliged to work with a man of entirely different ideas, and who might thus be almost useless to him. This would likewise be a strong inducement to 1st class inspectors to secure the approval of the deputy superintendent by diligent attention to their duties.

The appointment of Assistant Deputy Superintendent.

2nd.—I think that it would be unadvisable to appoint deputy assistants in each office. It would divide the responsibility and prevent the assistant in charge from having that perfect control over his subordinates that it is absolutely necessary he should have. I think that the plan would be even highly objectionable in any office except in each of the Presidency offices, and in them the officer in charge should not in any way have his power curtailed, or his command over his hands in any way interfered with. Under the present system, moreover, the anxiety of the signaller to secure the approbation of his immediate superior by strict attention to his duties is a sufficient guarantee in most cases that he will satisfactorily perform his work; and on this account I consider it would be unadvisable to introduce a system of promotion by seniority. A deputy superintendent, by a perfect system of office logs, can make himself acquainted with every act of every signaller during his hours of duty, and he can thus give the director general all information on this head, and at any moment give him the character of any signaller he may wish to know about with a view to promotion or otherwise. I think that this inducement would do very much more to secure the signaller's attention to office duties than any small allowance. A system, such as I recommend, would stimulate the hands in every office to vie with one another in pleasing and satisfying their superior; whereas a system of promotion by seniority would damp their energies, and make them all dummies and mere machines.

Regarding the Deputy Assistants.

3rd.—I would suggest that in the three Presidency offices only an extra allowance of fifty rupees (50 rupees) be placed at the disposal of the officer in charge to divide between

Regarding office allowance.

				Rs.	
2	3rd Class Inspectors	-	-	200	for lines.
4	3rd Class Inspectors	-	-	200	for offices.
2	1st Class Overseers	-	-	150	for lines.
2	2nd Class Overseers	-	-	100	ditto.
5	1st Class Signallers	-	-	100	for offices.
15	2nd Class ditto	-	-	80	ditto.
20	3rd Class ditto	-	-	65	ditto.
30	4th Class ditto	-	-	50	ditto.
25	1st Class Probationers	-	-	40	ditto.
20	2nd Class ditto	-	-	30	ditto.
20	3rd Class ditto	-	-	20	ditto.

I can safely assert that the expense of carrying out my suggestions regarding the conservancy establishment will effect a saving, and I believe the plan for working would induce no additional expense, while it would very materially conduce to the efficient working of the department.

I would shrink from proposing any scale of pay for the higher officers in the department had you not pressed for an expression of my opinion on this subject. I think that it would be best to refer to the scale of salaries given to officers in other departments holding berths of equal responsibility, and who have been brought out from England under covenant expressly for the purpose of serving Government in such department. Uncovenanted servants even in departments where there is not one quarter the responsibility, and but little of the never-ceasing wear and tear that we are subject to by day and night, if attached to an office, and the constant exposure to all seasons if on the line, are much higher and better paid; the Postmaster General of Bengal, for instance, drawing 1,500 rupees, and the Postmaster of Calcutta drawing 700 rupees. I would mention, to illustrate this, that no insurance office will accept the life of an officer in the Government Telegraph Department except at 20 per cent extra premium for risk, extra wear and tear, and exposure in profession. This is undeniable, as I can prove from correspondence with one of the largest insurance societies; and, moreover, I have had to pay this extra premium myself. I am, however, sure that if 50 rupees were added on to the salaries of all above the rank of 2nd Class Inspectors B Grade (3rd Class Inspectors in my Statement C) to 1st Class Inspectors inclusively, it would induce many valuable hands to remain in the department, who are being induced to enter some other service merely on account of the poor remuneration they get in this.

Regarding the title to be given to the officer in charge of a telegraph station, I consider that of "Telegraph Master," irrespective of any rank in the department, would be an excellent substitute for assistant and the host of other names used at present.

I trust, while writing on this subject, that it will not be considered out of place in a confidential report to mention that I really cannot understand the use of superintendents of divisions; but on the contrary I have every reason to believe that in the divisions where they are recognised, they are much in the way of the well working of the Circles under them, causing a deal of circumlocution and red-tapism, whereas the Deputy Superintendent should have direct access to the Director General. I believe you concur in this opinion, as you but very rarely find any necessity or occasion for acting in your capacity as Superintendent of the Eastern Division. The deputy superintendent would in this case become superintendent of Circles, and the assistant deputy superintendent would be styled assistant superintendent.

I sincerely trust that some of my proposals and expressions of opinion may prove useful to you in organising our department.

From *C. Galbraith, Esq.*, Deputy Superintendent of Telegraphs, Punjab Circle, to Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India (No. 61); dated Umballah, 4 June 1861.

On your No. 92, calling for confidential opinion on certain points, I remark as follows:—

Point No. 1.—My experience of the value of assistant deputy superintendents is not such as to incline me in their favour. A good experienced book-keeper and office manager appears to me much more desirable and serviceable, and this, where procurable at all, is procurable for one-third the cost of an assistant deputy superintendent.

Point No. 2.—In large offices with six, seven, and eight signallers, supposing the department to have judicious arrangements as to the admission of candidates and their after promotion, I conceive that the two head signallers, who would of course have gained their present position not merely by dexterous signalling, but by proofs of honesty, sobriety, and general intelligence, should be made captains of their respective watches. The effect in practice of a deputy assistant in an office, as of assistant deputy superintendent in a Circle, would be that an indifferent assistant in charge will throw the whole work upon him, and make for himself a sinecure; while the active assistant in charge would find his deputy assistant more of an incumbrance than anything else. This is my private opinion, but I feel confident that an application to the six most active and successful assistants in India would produce replies in accordance therewith. In small offices, such as many of mine are, the idea of a deputy assistantship is altogether inapplicable. Several of my offices have but one signaller in all, and many but two. For these latter only could I desire the existence of such a class as deputy assistant, for out of that class I would choose the assistants for such small offices; on this account, that when a high paid assistant is appointed to

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them, with, perhaps, a boy of 14 to assist, there is a tendency to throw the whole office work, night and day, on the probationer, that the assistant may live the life of an idle gentleman.

Point No. 3.—I am no friend to office allowances at all. On arriving at a certain rank and pay, a man should be entitled to an office, and his pay should be independent of such accidents as there not being, at the moment, an office to place him over, or the closing of an office where he has charge. I think the little addition to his dignity, which an assistantship gives, and the better opportunity it affords him for exhibiting his abilities, and the greater convenience and comfort which, as the master of the house, he can command, the last consideration weighing especially with married men, will always make the charge of an office desired. But anyone may avoid the responsibility by descending a step in rank and pay, which he should be compelled to do if he showed any disinclination to take charge, whenever and wherever required.

Points Nos. 4 and 5.—I would have an inspector over a certain portion of line, say in this Circle from Lahore to Peshawur, from Lahore and Dera Ismail Khan to the Scinde frontier, from Lahore to Umballah and Simla, from Umballah to Agra, and from Delhi to Fattyghur through Rohilkund; in all five. Each of these portions I would subdivide into about two or three districts, each having a native artificer over it. Whether the inspectors should be called 3rd, 2nd, or 1st, would matter nothing, and is, I think, a question not at all connected with the good working of the line. It may be necessary that there should be several grades in order to reward deserving men; but I do not see any other use in them, and I think the pay of a 2nd class inspector sufficient for a man who is, in a majority of cases, simply a mechanic, and who has the easy task of seeing that two native artificers keep a couple of hundred miles of line in order, varying their irresponsible life by an occasional march from end to end of their line, during which, having all their expenses paid by the department, tentage, carriage, and servants, they are able to save two-thirds of their travelling allowance, to which allowance I am not altogether friendly, still less am I an advocate for their drawing horse allowance, which was never granted till now. You will see that I am not one of those who consider the Telegraph Department under-paid, and that in principle I am opposed to allowances, and should prefer a consolidated salary.

Point No. 6.—European artificers I do not think are required.

Point No. 7.—At every office where there is not a native artificer stationed, I would have an active, intelligent Jemadar, chiefly, if not wholly, for the line, and prepared to start in case of interruption by horse, camel-dawk, or on foot. From these ranks the native artificers should be replenished. With these and native artificers, I believe line guards might be dispensed with in all cases with advantage.

Point No. 8.—The signallers required for the efficient working of the offices in this Circle are :—

1. Attock - - - 2	13. Nynce Tal - - 2
2. Allyghur - - - 2	14. Peshawur - - - 2
3. Bareilly - - - 2	15. Rajunpore - - - 2
4. Delhi - - - 7 and an assistant.	16. Rawul Pindee - 3
5. Dera Ghazee Khan 3	17. Shahjehanpore - 2
6. Dera Ismail Khan 2	18. Simla - - - 2
7. Jullundur - - - 2	19. Umballah - - - 7 and an assistant.
8. Lahore - - - 7 and an assistant.	20. Umritsur - - - 2
9. Mooltan - - - 3	
10. Moradabad - - 3	
11. Meerut - - - 3 and an assistant.	
12. Murree - - - 2	
	TOTAL Signallers - 60 and 4 assistants.

Where I have not named an assistant, it is meant that the assistant should himself take a share, though not necessarily an equal share, in the work.

Point No. 9.—This it is impossible to decide upon at the present moment, when a deputy superintendent's office is kept in a constant fever of work by the multitudinous demands for returns, and the care and watchfulness required by sudden and only half-explained changes in system, and the tangled condition of last year's accounts owing to Mr. Lima's (I venture to assert) absurd and useless alterations, to which this particular office may add the misfortune of being under the Punjab Government, which, as if the chief of the Department, and the Supreme Government, did not call for returns enough, sends in its demands also; and the still unsettled arrear accounts of Mr. Harington, on which I have just received a long letter from the Accountant General, calling for long and difficult explanations. At present I should be glad of two or three times my present staff, but I hope we shall soon be settled down into something like regular work when no such large number will be wanted.

Point No. 10.—I approve of the classification you suggest, only that I would make the transition from one class to another a much more important and valuable promotion than from one grade to another. But above all, and before all, neither one nor the other should be made possible to a candidate without his undergoing an examination, more and more trying as a signaller advances in rank; that for passing to another class being unmistakably more severe than that for mere ascension from one grade to another. If such a multitude

multitude of examinations should be deemed too troublesome, then, perhaps, mere rise in the class might be made a matter of time, and the passing from one class to another be only through a successful examination, having four grades of strictness and severity. By this means we might at last get "Telegraph Masters" able to make easy calculations, to keep simple accounts neatly and correctly, to correct the mail news, made difficult by foreign names and European politics, and to decide on the sense or nonsense of a message, logically and grammatically speaking, independently of the purport, which in many cases must necessarily be known fully only to the addresser and addressee. If it be said that the lads of the Department have not the means of obtaining such instructions as would enable them to pass these examinations, I reply, that if it is made their interest, they will find the means, thus employing their money better than at present. In this very office there are boys of 14 and 15, who would in Europe be probably acting as errand boys, and glad to get two or three shillings a week, while they are here getting four, five, and six pounds a month, with nothing to pay for house rent, fire or light. For such payments the Department has a right to expect a better article than what it is at present supplied with.

I do not object to the names you suggest. The term "telegraph master" appears to me a business-like term; but this very business-like character associated with it will, I believe, disgust many of the Morse assistants, who will not relish being put upon a level with post masters, and to whose "young gentleman" notions the appellation will be "snobbish."

ADDENDUM.

I HAVE in the foregoing adopted your principle of a complete separation between line and office duties; but you will probably remember, from remarks I have made in former letters, that I am no advocate for such separation, and think that Inspectors should also be in charge of offices where they are qualified by education, and where they are not, that they should be of a lower rank, and this would give rise to a 1st and 2d class inspectorship in accordance with your scheme. Were this idea adopted, I should then be in favour of the appointment of a deputy assistant, who would take charge while the inspector made his periodical visits, say four times a year, to his line. I have been much struck in the various parts of India, which I have visited, with the idle, useless life led usually by inspectors during the major part of the year, where the lines are at all in a finished state. I have known one sit still at his head quarters with an interruption on the line for days and days, having evidently a well-rooted notion that except in actual construction his business was to sit idly still, as the A. I. C. would keep the deputy superintendent informed of what happened, and some office or other would be sure to send out a peon to restore communication. I have known one who, being ordered to make a new piece of line, could not punish himself so far as to leave his home and advance slowly to the place, inspecting his line as he went, but remained at home till the very last moment possible, and then pleaded necessity as an excuse for travelling by dawk.* Such things as these I have known happening at the very time when a deputy has been hardly able to keep his offices going at all for want of hands. As a contrast to the above, I have known an inspector urgently beg his deputy to give him office work in addition to his own.

An inspector cannot be too near his work, or to the place where he will hear of his work, and therefore I would have him in the signal room, and not located a mile or two off in the bazaar, and satisfied with making an occasional visit to the office.

From *J. H. Nowill*, Esquire, Deputy Superintendent of Telegraphs, Central India Circle, to Colonel *C. Douglas*, Officiating Director General of Telegraphs in India and Ceylon, No. 4, dated Camp Benares, the 13th July 1861.

I HAVE the honour to acknowledge your No. 87, dated the 11th May current, which was received at Rewah on the 15th ultimo, and beg respectfully to reply to the several points at issue.

1st. An assistant deputy superintendent for the C. I. C. is very desirable for its better conservancy, and to prevent its deputy being removed for months at a time from his head quarters on tours of inspection, much to the detriment of his other duties.

2d. Deputy assistants and head signallers at the offices shown below would always ensure efficiency in the several signal offices during the absence of the senior officer. There should, I think, be three classes of signal offices, with suitable appointments pertaining to each class. The following suggestions are offered for your approval and sanction if approved of:

FIRST CLASS SIGNAL OFFICES.

				Assistants.	Office Allowance.	Deputy Assistants.	Allowance.
					Rupees.		Rupees.
Hyderabad	-	-	-	1	75	2	25 each.
Nagpore	-	-	-	1	50	1	20
Jubbulpore	-	-	-	1	50	1	20
Mirzapore	-	-	-	1	50	1	20

The

* I have known another persist in not learning the Morse, lest he should be disturbed in his tranquil existence by being set over an Office.

App. No. 2.

The duties of the Hyderabad office are very heavy, forming as it does a branch to the three Presidencies. I do not think that less than two deputy assistants would answer.

SECOND CLASS SIGNAL OFFICES.

	Assistants.	Allowance.	Head Signallers.	Allowance.
		<i>Rupees.</i>		<i>Rupees.</i>
Kurnool - - - -	1	30	1	15
Chanda - - - -	1	30	1	15
Seonee - - - -	1	30	1	15
Rewah - - - -	1	30	1	15

THIRD CLASS SIGNAL OFFICES.

	Assistants.	Allowance.
		<i>Rupees.</i>
Wurrungull - - - -	1	30
Chinnoor - - - -	1	30

These offices being seldom used except in cases of interruption, or very imperfect communication, I consider an assistant at each ample.

Two writers for the Hyderabad office are necessary (which have been engaged since the opening of the circle), and one each for the other first class offices. Writers for the second and third class stations are not required for the present.

3rd. For every 400 miles of line I would suggest there being—

One first class inspector, one second class inspector, one third class inspector; the two latter to be under the immediate orders of the former. Besides these, there should be an artificer or an assistant artificer (European or East Indian; I have no opinion of natives for these situations) for every 70 or 80 miles of line; their head quarters being, as a general rule, situated midway between two telegraph stations. Were testing instruments, supplied to these subordinates, the best results would, I am sure, ensue. I am decidedly of opinion that European and East Indian artificers cannot be dispensed with in my circle without detriment to the interests of Government and the public. I have on former occasions pointed out the many natural difficulties line officers in this circle have to encounter. These are—no roads, or very bad ones, dense jungles, large rivers, and numerous unbridged streams.

4th. I think it very desirable to have foot patrols; these should be posted at every 10th or 15th mile, according to the nature of the country through which the lines pass. Mounted men would be of little or no use whatever for five months out of every 12—for the same reasons that artificers cannot be dispensed with. I may remark that foot patrols, when properly looked after by the inspectors and artificers, do their work well, regularly, and, I may add from personal experience, satisfactorily.

5th. The number of signallers required for my several offices is as follows:—

Hyderabad - - - -	10	Jubbulpore - - - -	6
Nagpore - - - -	6	Mirzapore - - - -	6

The last named should have eight hands when the cable across the "Ganges" is at fault, as is the case now,—owing to which a temporary office has had to be opened—

Kurnool - - - -	4	Seonee - - - -	4
Chanda - - - -	4	Rewah - - - -	4

Wurrungull and Chinnoor three a piece. An extra hand at these two offices should be allowed during the rains. In the foregoing distribution of signallers I have not allowed for casualties, such as sickness, notice to leave the department, removals, leave of absence, and death.

6th. The rates of salary for signallers, as proposed in your letter under reply, are liberal, and I have nothing to suggest on this head.

7th. I have always been of opinion that the term assistant for the officers in charge of telegraph stations is the most appropriate that can be used. If it is necessary to change the designation, I beg to suggest the term "officer in charge." I think no one could reasonably object to it.

8th. The number of peons and other office servants employed at the different signal stations is all that is needed; but no further reduction on this head can be made with safety.

In conclusion—as my views do not accord with yours on several important points at issue—I trust you will not charge me with presumption in having expressed my sentiments clearly. Believe me, I have been influenced by no personal motives in what I have written and suggested; my whole and sole desire being to see our telegraph prosper, and enjoy the confidence of the Government and the public.

From *G. H. J. Smith*, Esq., Deputy Superintendent of Telegraphs, Dacca and Arracan Circle, to Colonel *C. Douglas*, Director General of Telegraphs in India, No. 158, dated the 6th June 1861.

App. No. 2.

I HAVE the honour to reply to your letter No. 94, dated 11th ultimo.

As regards the necessity of appointing an assistant deputy superintendent to each circle, I do not think there can be the slightest doubt on the following grounds:—

In the event of the deputy being at any time compelled to proceed to any distant point of the circle, there will always be a responsible officer available to carry on the work.

From the thorough local knowledge possessed by each assistant deputy of the circle and all in it, he is enabled to check expenditure, and know exactly upon whom to attach blame in the event of the offices or line working badly.

In recommending the appointment of assistant deputy superintendent to each circle, I respectfully beg to state that their appointment should have a higher object than merely to relieve the deputy of the drudgery of office work.

I would describe their duties as follows:—

1st. That the circle be equally divided between the deputy and his assistant. That their head quarters be fixed in the centre of their division, which should be the deputy's head quarters. Thus in my circle my office would be at Chittagong, and my assistant's at Dacca.

2d. That all subordinate officers under the assistant deputy should submit their accounts, letters, &c., to him direct.

3d. The accounts are simply to be checked, registered, and forwarded on to the deputy. Letters which the assistant deputy cannot dispose of, also should be passed on to head quarters with a docket. In the event of the deputy superintendent leaving at any time, the assistant deputy could shift to head-quarters with very little inconvenience, having but few records to move.

Relative to the 2d question, as to the advisability or otherwise of appointing a deputy assistant to each office, I will answer fully when I come to the question about signallers generally.

Question 3—On the subject of office allowance, I beg to reply as follows:—For the class of men we have generally in our offices, I think the present rate of office allowance very liberal; but if it is intended to put the establishment on a more respectable footing by the employment of gentlemen as office managers, I think few would care to undertake the responsibility of an office for 20 or 30 rupees per month. 100 (one hundred) rupees would not be too much for a large office, and 50 or 75 for unimportant ones.

Question 4—Number and grade of inspectors required for the conservancy of the lines.

I agree with you in thinking that native artificers, subordinate to 1st and 2d class inspectors, are necessary for line duty; but I am in doubt about the entire abolishment of the patrol system.

I will state my reasons for it. Our offices are on the average 100 miles.

In the event of the line breaking midway, or anything like it, each native artificer will have to ride, walk, or boat 50 miles. With the miserable race we have here, this would be considered a feat if done in two days.

On discovery of the break, the artificer certainly could connect the line with copper wire, but it would take some time before he could collect coolies (or rather ryots, for coolies there are none) to repair it.

The patrol, if he goes over his beat but once in 24 hours, will see the broken line, and be able to join over, and from being a resident in that part of the country, can obtain assistance earlier to effect permanent repairs.

I am aware that the present method of patrolling is faulty—it is not the fault of the system, but the apathy of the officers entrusted with carrying it out.

1st.—The complaint is generally that the men do not patrol the line daily.

2nd.—That many absent themselves from their beats for days together, &c.

With a smart native overseer to look after them personally once a month, and an inspector to look after the overseer, this state of things would soon be remedied.

I would more particularly employ the native artificer in keeping the line in order, as the patrols are not to be trusted in this matter, as they are prone to show their zeal by running up heavy bills monthly on this account.

With reference to your remarks on the nomenclature of the various grades in the department, and the scale of pay for signallers, I respectfully concur with you with this exception—I think for the title "Telegraph Master" "Manager in charge" would be more euphonious.

The classification might be as follows:—

Manager in charge	-	-	-	-	-	Rs.	120	} 1st Group.
Assistant in charge	-	-	-	-	-	"	100	
Head Signaller	-	-	-	-	-	"	80	
1st Class Signaller, 1st Grade	-	-	-	-	-	"	70	} 2d Group.
Ditto	-	2d	"	-	-	"	60	
Ditto	-	3d	"	-	-	"	50	

App. No. 2.

2d Class Signaller, 1st Grade	-	-	-	Rs.	45	} 3d Group.
Ditto - 2d "	-	-	-	"	40	
Ditto - 3d "	-	-	-	"	35	
3d Class Signaller, 1st Grade	-	-	-	"	30	} 4th Group.
Ditto - 2d "	-	-	-	"	25	
Ditto - 3d "	-	-	-	"	20	

The other information, called for in your letter under reply, will be found in the accompanying tabular statements.

From *H. Man*, Esquire, Deputy Superintendent of Telegraph in Scinde, to Lieutenant-Colonel *C. Douglas*, Officiating Director General of Telegraphs in India; No. 503, dated Kurrachee, the 5th June 1861.

I HAVE the honour to acknowledge the receipt of your No. 86 of 11th May, and to forward my opinion on the various subjects therein mentioned.

1st. An assistant deputy would be a great assistance to the deputy, particularly if he was well versed in accounts; at present the deputy's time is fully taken up in his office.

2d. In 1st class offices a deputy assistant would be of great service. I do not consider the appointment requisite in minor offices..

3d. I consider 50 rupees office allowance for 1st class offices, and 30 rupees for 2d class offices, sufficient—(the present rate); the deputy assistant for a 1st class office should receive 20 rupees.

4th. Two 1st class inspectors, two 2d class, and four 3d class are required for this circle.

5th. Ten native artificers wanted, to be on duty at the offices—these men to be allowed camels or horses, as at present in Scinde circle.

6th. I consider it advisable to have at least two European artificers, (unless the grade of 3d class inspectors is kept on); these men having been, I presume, promoted from the grade of artificers, should be well acquainted with line work in case of any emergency.

7th. In consequence of the line in Scinde circle passing over a considerable distance of Runn, it is necessary, for this season at least, that 10 horse or camel patrols be kept on, especially for the bad districts. If during this season the line stands after the repairs are executed, this number of guards can be much decreased.

8th. The following is the report of number of signallers required at each office in Scinde circle:—

	Signallers.	Probationers.		Signallers.	Probationers.
Kurrachee	4	2	Shikarpore	1	1
Kotree	2	1	Jacobabad	2	1
Hyderabad	6	2	Kusindre	3	1
Tarooshah	1	1	Buddeena	2	1
Sukkur	3	2	Nug. Parkur	3	1

9th. Writers are not employed in telegraph offices in this circle; the present establishment is quite sufficient of other servants, as also the pay.

10th. I beg to suggest the following designations for the offices of the department:—

Lines	{	Superintendent	-	-	-	Circles (now Deputy Supdt.),
		Deputy Superintendent	-	-	-	
		Inspectors	-	-	-	1st, 2d, 3d Class.
		Artificers	-	-	-	All Natives.
Offices	{	Message	-	-	-	Controller.
		Assistant	-	-	-	
		Signallers	-	-	-	1st, 2nd, 3d Class.

Remarks.—I believe in many instances 2d class inspectors have been promoted without having any knowledge of line duties. On this account I have recommended the 3d class inspectors being kept on, provided they are promoted from the grade of artificers.

Line guards have been some time dispensed with in Scinde, except in the Runn—the system has been to keep camels at each office ready to start out on interruption being reported.

When the lines pass through a very bad country, I think testing houses should be erected at each, 80 to 100 miles or about—by stationing a mounted guard, with a 3d class inspector, signaller, or probationer, on duty to test the line at certain periods, cause of interruption would be soon ascertained and remedied. This plan has been adopted in the Runn between Buddeena and Nug. Parkur and Deesa, and will be fully tested this season.

Signal Branch.—In Scinde provisions are very high, and the signallers are disadvantageously placed with regard to other circles on the same pay.

The rates quoted by you are, I believe, sufficient to induce respectable hands to join—the difference between the 2d and 3d class pay to signallers (say 60 and 50 rupees) should, I consider, be given with regard to seniority and due capability on the part of those now serving.

From Major *C. Douglas*, Officiating Director General of Telegraphs in *India*, to the Officiating Deputy Superintendent of Telegraphs in *Bengal*, and the Deputies of all other Circles, No. 95, dated the 11th May 1861.

App. No. 2.

GOVERNMENT having called upon me to prepare a schedule having in view the fixing on a permanent scale the establishment of all grades in this department, I shall be glad of your confidential opinion on the following points :

1. The necessity of appointing an assistant deputy superintendent to each deputy superintendent who might relieve the deputy of much of the drudgery of his office work, and allow him more time to devote to his lines.
2. The advisability of appointing a deputy assistant in each office to insure the presence of either the assistant or his deputy constantly in the signal-room.
3. The amount of office allowance for the assistant and his deputy you consider would be a sufficient inducement to assistant and others to hold such appointments.
4. The number and grade of inspectors you consider necessary for the conservancy of the lines in your circle.
5. The number of artificers you consider necessary in your circle, stating whether Native or European.
6. Whether you are of opinion that any inconvenience would result from abolishing entirely the grade of European artificers.
7. The number of line guards and patrols you consider necessary, and whether they might not be entirely dispensed with by having good native artificers posted at every office.
8. The number of signallers you consider necessary for the efficient working of your offices, detailing these separately, giving the number of signallers necessary for each.
9. The same with regard to writers and office servants, and their scale of pay.
10. A convenient classification of the various grades in the department.

Remarks on the above.

4. It appears to me that 1st and 2d class inspectors with native artificers are alone necessary for line duties.

6. I consider that European artificers might with advantage be dispensed with. The real working man on the lines is the native, and the superintendence of his work would be better in the hands of inspectors. The sum allowed to European artificers is not sufficient to secure the service of respectable men for these appointments.

7. I am very doubtful of the desirability of entertaining line guards and patrols. If the repairs and working condition of the line are efficiently controlled by the inspector in charge, it appears to me there is nothing to apprehend from interruption but the breaking of the line or posts by some sudden accident. In such cases the interruption is immediately known at both stations between which it has occurred; and if at these stations a native artificer was placed under the orders of the office assistant with the means of proceeding out on the line at any moment, I am of opinion that communication would be restored more rapidly than by the agency of line guards who can know nothing of these occurrences; they pass the scene of the mischief, and even then it appears doubtful whether they would be able to repair it.

10. My own idea of the classification is as follows :

Deputy superintendent one per circle.

Assistant deputy superintendent one per circle.

1st and 2d class inspector in sufficient numbers for line duty only.

Signal Branch.

Rates of pay as follows, exclusive of office allowance for Europeans and East Indians, and half these rates for natives :

120	70	45	30
100	60	40	25
80	50	35	20

It seems desirable that these grades should be broken up into groups of 2, 3, or 4 each group, characterised by a distinctive appellation,—thus assuming the groups to be of four in number, the first group might be termed office assistants, or “Telegraph Masters,” being of the 1st, 2d, and 3d class, and it is intended that these classes should hold by right the chief or subordinate charge of offices.

The 2d group might be termed “Head Signallers,” and the 3rd group, “Signallers,” and the 4th group “Probationers,” each group having three classes.

I am by no means satisfied with the convenience of these names. It must be borne in mind the public appear to have been always at a loss for a term by which to address the officers in charge of a telegraph office, messages for despatch are frequently addressed to the “Superintendent,” to the “Deputy Superintendent,” to the “Manager,” or the “Chief Clerk,” to the “Clerk in charge,” to the “Gentleman in charge,” to the “Signaller in charge,” to the “Baboo in charge,” to the person in charge, and it is therefore very desirable that some unmistakable term should be adopted for designating the head of the signal office,—“Telegraph Master” appears to me such a term, the only objection is its apparent uncouthness, but its analogy with “Post master” would, I think, tend to lead to its ready acceptance and adoption by the public.

App. No. 2.

Memorandum.

HAVING in my No. 1263, dated the 20th August, submitted in original replies from the various deputy superintendents of this department to a letter from me, having reference to the proposed revision of establishment, it appears desirable that that letter should also form an accompaniment to the proposed scheme; a copy is now therefore forwarded.

5 September 1861.

C. Douglas, Lieut. Colonel,
Officiating Director General of Telegraphs in India.

EXTRACT from the Proceedings of the Government of India, in the Financial Department
(No. 14,578); dated 10th December 1861.

EXTRACT from the Proceedings of the Government of India, in the Home Department
(Electric Telegraph), No. 3364, under date the 6th November 1861.

READ again Extract from the Proceedings of Government in the Financial Department, No. 5039, dated the 24th of April, calling for a revised schedule of the establishment of the Electric Telegraph Department.

Read again letter to the Officiating Director General of Electric Telegraphs in India, No. 926, dated the 8th of May, on the subject.

Read reply of the Officiating Director General of Telegraphs in India, No. 1263, dated the 20th of August, and its accompaniments.

Lieutenant Colonel Douglas' Report shows that the present sanctioned cost of the Telegraph Establishments is Rs. 92,432 5 a. 6 p. per mensem. This he proposes to reduce to 87,526 rupees, being a saving of Rs. 2,906 5 a. 6 p. The saving this year, however, it is estimated, will be Rs. 4,906 5 a. 6 p. as the proposed increase of salaries will not be immediate, but progressive.

The principal features of the Director General's scheme are :

1. An alteration of the present designations of the higher officers, and an increase to their salaries and numbers in some cases.
2. The abolition of the grade of European artificers, the work of construction having ceased.
3. The abolition of the Foot Line Guards and Horse Patrols, and the creation of a class of native artificers, who will reside at the offices, and be under the immediate orders of the assistants in charge.

The alterations in the designations and salaries proposed by Lieutenant Colonel Douglas, are as follows :

1. The three present "Superintendents of Divisions," drawing one a salary of 600 rupees a month, and the other two, 500 rupees a month, to be replaced by three "Directors," one of whom is to receive 1,000 rupees* a month, and the other two, 800 rupees a month.

2. The ten "Deputy Superintendents of Circles," to be styled in future "Superintendents," and to be increased to 15, divided into classes as follows :

	Rs.
One 1st Class Superintendent * - - - - -	700
Two 2d ditto, at 600 - - - - -	1,200
Four 3d ditto, at 500 - - - - -	2,000
Five 4th ditto, at 400 - - - - -	2,000
Three Extra Superintendents, at 350 - - - - -	1,050

The Director General proposes to assign to each superintendent of a circle an assistant superintendent upon 300 rupees per month. The object of this appointment is to admit of either the superintendent or his assistant constantly superintending the arrangements on the lines. Lieutenant Colonel Douglas considers this an important feature of his scheme.

3. The next grade of superior officers is that of inspector. These officers are at present divided into four classes, known as 1st class; 2d class A.; 2d class B.; and 3d class. The simpler designations of 1st class, 2d class, 3d class, and 4th class, are proposed. The salaries of the classes continue as before, but their position is improved by a re-adjustment of the proportions assigned to the different classes, and their number is increased from 85 to 100. The proposed changes in this branch are shown below :

Present.	Salary.	Proposed.
17 1st Class - - - - -	250 - - - - -	20 1st Class.
12 2d Class A. - - - - -	200 - - - - -	30 2d Class.
20 2d Class B. - - - - -	150 - - - - -	40 3d Class.
36 3d Class - - - - -	100 - - - - -	10 4th Class.

Lieutenant Colonel Douglas suggests in his 18th paragraph, that the Director General should be vested with power to make any promotions or changes below the grade of inspectors which he may consider necessary without reference to Government, provided that they are within the sanctioned limit of expenditure; and that a copy of his departmental orders may be accepted as sufficient authority for such changes by the Audit Department.

Remarks.

* These are Staff salaries drawn by Military officers.

Remarks.—The Governor General in Council is of opinion that the officiating Director General has shown good ground for the several changes which he recommends, and that they may all be safely adopted. It is understood that some of the reductions have for some time been in progress. His Excellency in Council, however, greatly doubts whether the salaries proposed for the three superintendents or directors, as Lieutenant Colonel Douglas would now call them, are sufficient. He thinks that the two junior superintendents, commencing on 700 rupees a month, should receive in the second year of their appointment, and in every following year, an increase of 50 rupees a month up to 1,000 rupees, which should be the maximum, and that the senior superintendent, commencing on 1,000 rupees a month, should receive in the second year after his appointment as senior superintendent, and in every succeeding year an increase of 100 rupees a month up to 1,500 rupees. These salaries, as regards future incumbents, should be consolidated without reference to military rank, if they are held by officers of the army. The Governor General in Council has no objection to vesting the Director General with the authority proposed in the 18th paragraph of his letter in regard to promotions in the lower grades of the Department.

ORDERED, that the case be referred to the Financial Department for further consideration of the proposed Establishment, with reference to Extract from that Department, No. 5039, dated the 24th April 1861.

Financial Department, Fort William, the 10th December 1861.

RESOLUTION.

THE Governor General in Council is pleased to sanction all the above proposals.

Copy forwarded to the Home Department for information, and for the issue of farther necessary orders.

Copy forwarded also to the Auditor General of India, in the Telegraph Department, for information and guidance.

(No. 183.)

FORWARDED to the Director General of Telegraphs in India, with reference to his letter No. 1263, dated the 20th August last.

Home Department,
10 January 1862.

By Order,
(signed) *A. M. Monteath*,
Under Secretary to the Government of India.

(Home Department.—Electric Telegraph.—No. 6, of 1865.)

To the Right Honourable Sir *Charles Wood*, Bart., G. C. B., Secretary of State
for India.

Sir,

Simla, 7 July 1865.

IN continuation of our Despatch, No. 2, dated the 6th October 1864, we have the honour to transmit, for your information, the accompanying copy of reports submitted by Colonel Douglas on the defective working of the Telegraph Department, and on the measures required for promoting its efficiency, together with a copy of our reply to that officer, and of the other orders that we have issued on the subject.

From Colonel Douglas, No. 2939, dated 1st February 1865, with App. A. to F.
From Colonel Douglas, No. 269, dated 23rd May 1865, and enclosures.
To Colonel Douglas, No. 1626, dated 17th June 1865.
To Secretary to Government of Bengal, Public Works Department, No. 1935, dated 29th June 1865.
Resolution to Financial Department, No. 1937, dated 29th June 1865.
Resolution, from Financial Department, No. 1178, dated 3d July 1865.

We have, &c.
(signed) *John Lawrence*,
W. Mansfield,
W. Grey,
G. N. Taylor,
W. N. Massey,
H. M. Durand.

From Lieutenant Colonel *C. Douglas*, Director General of Telegraphs in India, to *E. C. Bayley*, Esq., Secretary to the Government of India (No. 2939); dated 1 February 1865.

YOUR No. 1344, of the 13th July, in reference to the many complaints of the defective working of the Telegraph Department, invites my attention to the necessity of considering whether there are any measures "which may be likely to promote the practical efficiency

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of the Department," suggests, in view to that result, the abolition of the grade of directors and the constitution of smaller circles, each controlled by a superintendent on a superior rate of pay, vested with larger powers, and directly responsible to the Head of the Department; and observes that, if in this, or in any other direction, I may deem it expedient to propose changes involving increased expenditure, I will point out whether such additional expenditure can be met, either by reductions in other directions, or by increasing the scale of charges for the transmission of messages. Your letter further suggests a closer and more effective supervision over both the lines and offices.

2. The working of certain of the lines of the Department, during the past rains, has been unsatisfactory, beyond my experience, of any former year. I attribute this to the following causes :

- 1st. The incomplete state of many of the lines.
- 2d. Defective insulation.
- 3d. An insufficient strength of the signalling establishment.

3. As respects the first-mentioned cause, the bad working was not general, but was, as a rule, limited, either to lines still temporary, such as those of the Punjab circle, or to those in which, although the temporary supports had been replaced by iron standards, as in the case of the Indore, Bombay, Scinde, and Dacca circles, the change had, nevertheless, in consequence of the bad quality of the wooden top-pieces, sent from England with these posts, proved the reverse of advantageous; the risk of interruptions from breakage of the line, and of bad working from leakage of currents, having both been thereby largely increased.

4. This will be better understood when it is mentioned that, in these re-constructions, a 16-foot in length of generally sound and fairly serviceable wood had been replaced by the 3½-foot English wooden top-pieces of the Hamilton Standards; and that, along with the drawback of less than one-fourth of the original insulating power, obtainable from the wood itself, there was this further drawback, that, while the original posts were sound, and therefore, during rain, wet skin-deep merely, the 3½-foot tops, which replaced them, were, in consequence of their sponginess from rot, wet to the heart. Where, however, the Brooke insulators had been set up on these rotten posts, the leakage of current was usually sufficiently moderate to render work possible, with an exception that will be mentioned further on.

5. The second of the causes of the bad working, was bad insulation. Where the ordinary wooden posts in sound condition are used, as on temporary lines, insulation with a single line is not imperative; and it is rarely the case that signalling has to be entirely suspended, even during heavy rain. The signalling may be slow, it may entail repetition at every station, with the delays and errors which this process gives rise to; and it may require very large battery-power at one end of a line to get a perceptible current through to the other; yet signalling still goes on. The case is, however, far otherwise when more than one line is carried on the same set of posts; in such case, defective insulation leads to cross leakage, the "sent" signals returning to the sending station by the other wires, and being received at all the other instruments in the sending office, and *vice versâ*; and the signals along the various wires become so entangled at the receiving station, as to render receiving impossible through more than one wire at a time. Both in Calcutta and Bombay, the former having eight the latter five wires on the same supports, great inconvenience was felt this year from cross-leakage from the moment the rains had fairly set in, as only one line could then be worked at a time. Of the lines radiating from Calcutta, but two were, from the amount of business on them, of any great importance, viz., that to Agra, and that to Madras; but of those radiating from Bombay, there were three of great importance, viz., the line to Agra, and the coast lines north and south of Bombay, all as heavily worked as the direct line hence to Agra, and the impediments to work arising from cross-leakage were, in proportion, greater in Bombay than here.

6. The remedy for the cross-leakage, arising from defective insulation, which was then adopted, was two-fold:—The insulators had no provision for keeping the surface of the insulating material dry; and it is, I may say, exclusively over this surface, and not through the mass of insulating material that leakage takes place; it is true that, as merely the under-surface of the insulator was exposed, its position might be viewed as a sufficient protection; and, assuming the drainage from the lower edge of the iron outer-bell not to be diffused along the insulating surface, which is flush with this edge, but to fall clear of it, then this surface might, under ordinary falls of rain, remain dry; but such could not be expected to occur during heavy rain, as the rebound of the rain from the flat upper surface of the bracket would then be sure to wet thoroughly the portion of the insulating surface immediately above it, and thus the greater part of the insulating power would be lost. In order, then, to prevent this, and to ensure a zone of dry insulating material between the wire and the earth, under even the most unfavourable circumstances of weather, the sulphur cement was removed to a depth of one inch, both from the space between the inside of the outer iron bell and the ebonite cup; and from that, between the inside of this latter and the surface of the iron supporting-stalk of the insulator, so as to leave an air space, across which escape of current would be impossible, and to interpose a surface length of 2½ inches of insulating material between the iron outer-bell and the iron

iron stalk, a portion of which surface was pretty certain, under the most adverse circumstances, to remain dry. The diagrams will assist in explaining this. (*See Appendix A.*)

7. By the change mentioned, a materially longer path had to be traversed by the current ere it could pass from the outer-bell to the central iron stalk, and thence by the iron post to earth; and, what is of even greater moment, a zone of dry insulating material was obtained; for, as the space from which the sulphur was removed, though one inch in depth, is but one-eighth of an inch wide, the chance of rain reflected from the bracket, reaching the entire extent of the excavation, is very small indeed.

8. The possibility of cross leakage, under any circumstances, was prevented by the application of a wire between the iron bracket, which is common to each pair of insulators, and the upper end of the iron standard which carries them. It is clear that, under this arrangement, the leakage of current, instead of passing from each wire to its neighbour, must all pass direct to the earth; and that, consequently, none can pass out of any one wire to any other on the same post, and interfere with the signals passing through it.

9. The benefit resulting from these changes on this side of India was magical; all confusion of signals from cross leakage at once ceased, and the necessity of limiting work during bad weather to one only of the several wires occupying the same set of posts ceased also, and throughout the rains there has always been direct automatic communication with Agra, with instrumental aid at three intermediate points only, viz., Burhee, Benares, and Cawnpore, instead of at the eight stations following, viz., Burdwan, Ranee-gunge, Burhee, Dehree, Benares, Allahabad, Cawnpore, and Futteghur, at which instrumental aid had, in every previous rainy season, been found necessary.

10. Had these changes been as successful in the neighbourhood of Bombay as on the line hence to Agra, it is more than probable that there would have been no expression of public dissatisfaction with the working of the Department on that side of India. It is certain that the work was negligently or ignorantly executed; and it appears also certain that the superintendent took no such personal interest in the operation, as in an experiment of the kind was indispensably necessary to ensure a good result. The director of the division, Mr. Galbraith, did everything in his power, when the failure of the experiment proved it had been carelessly or ignorantly made, to have it better carried out; but Mr. Galbraith had his own work to attend to, and had not sufficient time for supplementing the short-comings of the Bombay superintendent.

11. The third cause of defective working was the insufficient strength of the signalling establishment, which was more marked in Western India than elsewhere. This insufficiency has characterised the Department almost from the beginning, and has continued throughout in spite of the efforts which have been made to render the service more popular. As instances of these efforts, I may mention that the pay of the junior grades has been improved, and a special allowance has been granted by Government to the signallers employed in the expensive province of British Burmah, as well as to those who have to suffer the inconvenience of living in temporary offices on the banks of rivers on occasions of the failure of the cables or air-spans crossing them; and a definite scale of pay has been laid down, depending on character and length of service. The treatment of signallers has also, in many respects, been rendered more considerate. A limit has been placed on the powers of superintendents to punish by fine, as also on the aggregate of fine which may be inflicted in any one month. The removal of signallers from the neighbourhoods where they were first engaged, or from the offices to which they may have been first posted, except at their own request, or in consequence of departmental necessity, has been prohibited, and every latitude has been permitted for exchanges amongst themselves. Copies of the circulars which affect signallers are given as Appendix B.

12. That some satisfaction has been felt by the signallers from these and other changes may be assumed from the absence of the complaints in the newspapers, at one time so frequently made by this class. Nevertheless, although a general permission has been given to train in every office where a probationer can be obtained, some difficulty as respects numbers still exists, and the establishment of signallers is still below the requirements of the Department. Along with the difficulty experienced in obtaining fit lads as probationers, there is also a difficulty in retaining their services when they have become qualified for the post of assistant or deputy in charge of an office. The extent to which this difficulty is felt in the Bengal Circle may be judged of from the circumstance that, whereas in 1862 the average pay of the signallers of that circle was Rs. 49. 12. 1. each, it was in 1864 Rs. 40. 15. 6. only each. (*See Appendix C.*)

13. As no change in the proportioning of salary to departmental standing had immediately been made, it is clear that this decrease in the average of salaries is due solely to a lower average of departmental service; arising, to a material extent, from the voluntary resignation of many of our most valuable hands, of from four to five years' service, for the purpose of entering better paid service elsewhere; and it is to the retention of this class of signallers that efforts should be directed. Were the difficulty felt equally throughout the Department, the proper and sufficient remedy would be a general increase of pay, but it is not so; the difficulty seems limited to the Bombay, Punjab, and Dacca Circles, to the main line hence to Bombay, and to the local lines in the neighbourhood of Bombay and Calcutta, and would not appear to be much felt in Southern India, or as to East Coast, or in Pegu. Some increase of pay to the signalling grades throughout the Department

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will be recommended, but what would suffice in this direction would, I fear, be inadequate to meet the partial difficulty I have mentioned; and some special allowance should, therefore, be granted, perhaps in the form of a main line allowance, to signallers employed on the more heavily worked main lines, as a compensation for the extra labour required on such lines, and for the skill in signalling which their efficient service demands. By these means, and by the grant of an allowance, as suggested in my Annual Report for 1861, to the signallers who may assist in the charge of offices open for continuous day and night service, the services of the valuable class above referred to would probably be retained.

14. Though not enumerated as one of the causes to which I attribute the recent bad working of the Department, I think that a generally insufficient scale of pay in the higher grades, not so decidedly present as past, is not entirely innocent of the result. The Department has been stinted throughout, not so much as respects the men at present in it, but as a Department. And I may mention that out of the 70 gentlemen appointed to it in England in 1857, only 26 now remain, five having died, six having been dismissed, and 33 having resigned, either to return to England or to join other appointments in this country.

15. The result of this early economy has been to load the inspecting grades with very inferior men; and at this moment there is no one in the grade of First Inspector of such mark or promise as to encourage me to recommend him to Government for promotion to the rank of assistant superintendent. The men in question, with perhaps two or three exceptions, know that they have no chance of promotion, and they are a barrier in the way of an improved establishment of inspectors, which probably death or pension will alone remove. The arrangement for recruiting the higher grades from England will bear good fruit in time; but if the supply is to continue, the inducements to join the Department, both immediate and prospective, must not be less than those presented by the Police and the Public Works Departments.

16. It will, therefore, be necessary to raise the scale of pay throughout the higher ranks generally. These increases, however, having for their object the encouragement of a superior class of men, it would be unnecessary that they should affect any of those inspectors who have already risen as high as their education, or character, or departmental utility warrants; and, in consequence, the increase in these grades should be conditional, on a certain test of qualification being satisfied. The details of the proposed increases will be given in the Proposition Statement, Appendix D.

17. As respects the remedies for the defects to which I charge the recent bad working, the first of these, namely, the incomplete state of many of the lines, will be remedied during the present working season. The following is a list of the principal reconstructions necessary, all of which are in progress:—

<i>Punjab Circle.</i>								<i>Miles.</i>
Umritsur to Peshawur	-	-	-	-	-	-	-	305
Rawul Pindie to Murree	-	-	-	-	-	-	-	41
Meerut to Rajpore	-	-	-	-	-	-	-	120
Roorkee to Hurdwar	-	-	-	-	-	-	-	19
<i>Indore Circle.</i>								
Indore to Bhoreghur	-	-	-	-	-	-	-	100
Pachora to Muxee	-	-	-	-	-	-	-	50
<i>Central India Circle.</i>								
Beizwara to Hyderabad	-	-	-	-	-	-	-	167
Hyderabad to Kamptee	-	-	-	-	-	-	-	425
Benares to Rewah (a part)	-	-	-	-	-	-	-	25
<i>East Coast Circle.</i>								
Dowlaiswaram to Coconada	-	-	-	-	-	-	-	32
Jellalore to Ballasore	-	-	-	-	-	-	-	30
Berhampore to Beizwara (a part)	-	-	-	-	-	-	-	150
<i>Bombay Circle.</i>								
Bombay to Broach (a part)	-	-	-	-	-	-	-	20
Poona to Sattara	-	-	-	-	-	-	-	64
Sattara to Mahableshwar	-	-	-	-	-	-	-	30
Poona to Ahmednugger	-	-	-	-	-	-	-	73
Sattara to Bellary	-	-	-	-	-	-	-	344
Belgaum to Vingorla	-	-	-	-	-	-	-	59
<i>Madras Circle.</i>								
Calicut to Kelaperamba	-	-	-	-	-	-	-	100
<i>Scind Circle.</i>								
Rajunpore to Kusmore	-	-	-	-	-	-	-	65
Kusmore to Jacobabad (a part)	-	-	-	-	-	-	-	10
Taroosha to Hyderabad (a part)	-	-	-	-	-	-	-	40
Hyderabad to Buddeena (a part)	-	-	-	-	-	-	-	50
Buddeena to Deesa	-	-	-	-	-	-	-	256

18. I have

18. I have mentioned that although certain lines had been furnished with Hamilton's $\frac{3}{4}$ standards, and were, therefore, what is termed "permanent," nevertheless, in consequence of the rotten state of the English top-pieces, such lines were in reality in a much more insecure condition than those they replaced. But as all that is necessary to render this class of line permanent is a change of top-pieces, of which there is an abundant provision available at the working points, no anxiety need be entertained on their account.

19. The second cause of bad working, namely, defective insulation, will similarly be remedied under the sanction lately accorded by the Government to the employment of Captain Mallock in providing insulators. Captain Mallock is well aware of my views on the very important subject of insulation. He is aware of the defects of the insulators hitherto in use, and has been furnished with a list of the conditions which any insulator intended for our Indian lines must meet; but previous to detailing these conditions it will be well to point out the defects which the Brooke pattern of bracket and insulator has been found to possess.

20. Both bracket and insulator are too weak, and great numbers were broken through rough treatment on being first put up; with a little experience, however, the necessity of care was learnt, and these "construction" fractures ceased, but neither bracket nor insulator are well adapted to their work. Their breaking strengths are 3 cwt., and $5\frac{3}{4}$ cwt., respectively; whereas the breaking strength, necessary to have suited them for employment on our lines, should not have been less than $7\frac{1}{2}$ cwt., that being the breaking strain of the Hamilton's $\frac{3}{4}$ standards; and, as has already been mentioned, no provision exists in the bracket against the splashing of rain from its surface into the insulator, nor in the insulator itself, for securing a zone of dry insulating surface.

21. The conditions to which I have referred as those indispensable with the brackets and insulators, which Captain Mallock will provide, are, as respects both, a breaking strength of not less than $7\frac{1}{2}$ cwt. As respects the bracket only, a diameter suited to our top-pieces and such a section at the part which clasps the top-piece as will permit of hard screwing up without fracture, and which, in the event of such hard screwing up, will allow of the swelling of the wooden top-piece without a greater strain being thrown on the bracket, then it may be readily rendered capable of resisting; a condition which has been proved necessary, by the fracture of many of the Brooke pattern of bracket at the part in question from the cause just mentioned, each such accident causing an interruption to communication, and a heavy expense in travelling charges and labour for restoring communication. Provision, without the necessity of screws or other special additions to the bracket, against its tendency to turn round on the post, under unusual strain, or in the event of excessive shrinkage of the top-piece in dry weather. Provision for readily applying a wire-stay or a timber-strut on either side of the post. A gable-shaped section of the bracket arm, or at least of that portion which is in the immediate neighbourhood of the insulator, in order to remove all tendency to the wetting of the latter by the splashing of rain upward from it.

22. As respects the insulator the conditions are:—An amount of dry insulating surface not below a stated minimum. Provision for carrying the wire on the top of the insulator, and not below it, as in Siemen's plan, or on one side as in Varley's,—neither of these plans being suited for heavy wire. The iron outer-bell to be provided with a rain-guard for the purpose of leading the rain, which would in heavy showers and under certain accidents of position of the insulator, form a continuous stream between its lower edge and the arm of the bracket, clear of the arm and to each side of it; and provision by means of side crutches for supporting the wire on the side of the insulator at places where the line makes angles; by which provision, the leverage and the heavy cross strain which in such cases is thrown on the insulator, and especially on the cement joints connecting its various parts, is rendered much less than would otherwise be the case.

23. All these conditions are met by a bracket and insulator which I have designed, but I think it unnecessary to limit the supply to any one pattern of insulator; and, accordingly, I have instructed Captain Mallock to obtain insulators of the best varieties in present use in England—excluding Siemen's, which I consider to be mechanically vicious in construction, and deficient in insulating power—and provided the makers can so modify their patterns as to meet the conditions I have laid down, or at least the more important of them.

24. A reference to what precedes will show these conditions to be four only, of which the first is indispensable in every effective form of insulator; the second necessary where heavy wire is concerned; and the remaining two slight improvements, costing nothing, the first improving the insulator as such, and the second adding to its convenience, but neither of them obligatory, and both therefore omissible, should sufficient reason be shown.

25. However numerous the varieties of insulator may be, there will be but one pattern of bracket, the various patterns of insulator fitting it indiscriminately, and permitting of their indiscriminate use. By this arrangement, should a variety of pattern of insulators be supplied, a conclusion respecting their relative good qualities may readily be arrived at, and no countervailing inconvenience be incurred.

26. The subject of brackets and insulators has occupied more space in this letter than I at first intended; but perhaps not more than its very great importance excuses, for with

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good insulation on substantial lines, but with no other departmental change whatever, satisfactory working will be the almost certain result. An excellent illustration of this occurs in the following comparison between the working of the Bengal Circle during the months of July of the present and of the past year.

27. A reference to Appendix E. will show that, whereas in the month of July 1863, the interruptions in the Bengal Circle aggregated 61 in number; these, in the corresponding month of 1864, after the lines and insulation had been improved, became reduced to eight; and this with no changes in the Establishment of the Circle, or in its higher officers, and in spite of the reduction in the average rate of pay of the Signalling Establishment which has already been referred to in paragraph 12.

28. From the Appendix above referred to it will also be seen that, whereas the mean time-interval for messages on the line from Calcutta to Agra was, in July 1863, 55 h. 50 m., and the minimum 20 h. 56 m., these became reduced in the corresponding month of the present year to 7 h. 36 m. and 0 h. 21 m., results solely attributable to substantial lines provided with adequate insulation.

29. In what precedes, I have pointed out the defects of the Brooke insulator and bracket, but it must not be supposed that the defects mentioned exist exclusively in that pattern. Insulators of various patterns approved in England have been successively tried on the Indian lines, and have failed chiefly from want of strength. One of the most approved forms of English insulator, viz., that of Mr. Latimer Clark, supplied to the Eastern Bengal Railway, was found defective in this respect, and had to be altered previous to employment on the lines of that railway; and, in fact, at this moment I do not believe that an insulator suitable as respects strength for the Indian lines, and at the same time possessing good insulating properties, can anywhere in Europe be obtained.

30. I have no doubt that when the insulators which I have designed, and which Captain Mallock is now procuring, or which may have been modified from existing English patterns to meet my views, are applied to our lines, they will be the strongest and most effectively insulated lines in the world.

31. In the letter under reply two suggestions have been made,—the first, to abolish the rank of Director; the second, to diminish the extent, and increase the number of Circles.

32. As respects the first of these suggestions, I cannot believe the change would be found a desirable one; it would certainly effect a nominal saving of 2,150 rupees a month in salaries, this being the amount at present paid to the three Directors; but if it has been suggested as the necessary complement of the proposal to increase the number of Superintendents, and that the cost of the measure may more easily be met in this manner than in any other, then I think I can presently show that any such provision is unnecessary.

33. I look on the idea as a most undesirable departure from the principle of division of labour and of personal responsibility. The necessity of some such division of labour and responsibility as that involved in the employment of three superior officers as Heads of Groups of Circles is not peculiar to this Department, but is felt and acted on in every public department throughout the civilized world, and in every private establishment large enough to permit of the whole of one man's time being employed in a distinct section of its work. If the saving could be made, and if the expenditure of the Department could be as closely scrutinized, its business as promptly conducted, the working of its lines as closely watched, and the difficulties and obstacles to good working as quickly met and removed, without directors as with them, then there might be good reason for the change; but it is certain that if the work of the three directors were transferred to the Head of the Department, it could not be as promptly done as at present; and further, the responsibility could not be transferred, the personal presence would be wanting, as well as the local experience of places, men, and things. Contingent expenditure would increase, and probably a much larger sum would be thus indirectly lost than could be directly gained by the proposed change.

34. I have not considered the saving in office establishment which the abolition of directors would give rise to, because that would be probably more than met by the cost of extra clerks in the Director General's Office, seeing that in his office some such subdivision of the Department as at present into two or more parts would be necessary for efficiency, and at the head of each a clerk of superior ability, on a salary such as is paid to the higher class of clerks in the larger public offices. The proposition, in fact, amounts to this: to obtain the profits of a business while escaping the expenses necessary for properly conducting it, or at least a part of them. Had the principle been feasible, its first application would have been scarcely left to a government.

35. The second of these suggestions, namely, that for reducing the extent and increasing the number of circles, has doubtless originated in the idea that the bad working which characterized certain circles during the past rains was due to their inordinate extent. I think it may be gathered from what precedes that any such idea is superfluous, other sufficient reason for the bad working existing in the condition of the lines themselves; but to meet this view still more directly, I will take the case of the Bengal Circle as it stood in the year 1860 and as it stands now.

36. In 1860 the Bengal Circle, which was one of the largest, had 2,302 miles of line, with 27 offices, and was managed by a superintendent unaided by any assistant superintendent, and was managed well. At present the extent of that circle is 1,725 miles, with 21 offices, and beside a superintendent, it has an assistant superintendent as well. The case as respects extent is, where extent is a question, and as respects the assistant superintendent, the same in all the other circles. There are not now, as in 1860, any very large circles, their dimensions having in 1863 been as much as possible equalized. I may put the case, however, yet more strongly. During the past 12 months the Bengal Superintendent has had, in addition to his own circle duties, the superintendence of the constructions going on in Assam, aggregating 667 miles, but entailing far more labour than is represented by the mere mileage, the accounts especially giving him much trouble; and during the whole of this period not only has he had no assistance in the control of this extra work, but he had not even the aid of his own assistant superintendent for the management of his own circle duties, the exigencies of construction on the Cis-Berham-pooter lines having necessitated the employment of this officer in construction duty on them.

37. Thus I have shown, in disproof of the supposed desirability of reducing the dimension, and in increasing the number of circles, that these are actually smaller now than they were in 1860; and that while then the superintendent was unassisted in the management, he has now an assistant superintendent to help him.

38. I have now to consider what those changes in the establishment of the department are, which would be likely to increase its efficiency.

39. First, as respects numbers, no change is required in the rank either of director or superintendent.

40. As respects this latter rank, the establishment of superintendents, as sanctioned under the re-organization scheme, is 15, of whom 10 were for employment in circle charge, one for the charge of stores, one as personal assistant to the head of the department, and three to fill any temporary vacancies that might occur.

41. Since the above establishment was sanctioned the following changes have been ordered or suggested. By Home Offices, No. 6597 of the 15th October 1863, it was directed that the superintendent of the Ceylon lines should be borne on the Indian list of superintendents; and my No. 2015 of the 13th November 1864 suggested that, in consequence of the new constructions in Assam, and between Agra and Deesa, two additional circles should be created.

42. The new line, Ajmere to Deesa, having been completed, it is most desirable to make the changes constituting it a new circle at once; and although the lines in Assam will not be completed until about the commencement of next official year, it is still, I think, desirable, to transfer the control of their construction to the officer who will eventually hold charge of the circle, and at once; the assistant superintendent, who was placed in charge of the construction, having broken down in the matter of accounts. In a late reference to the Government it was decided that temporary vacancies in the establishment of superintendents, such as those occasioned by sick absence to Europe, or by employment in other departments, should not be provided for by an addition to the permanent strength of the grade in which the vacancy had occurred, as in the re-organization scheme of 1861, but by officiating promotions from grades below. Under this ruling the three superintendents, provided in that scheme to meet such cases, must be excluded, the establishment of this grade will, therefore, remain as at present, the superintendents to be provided for the Ceylon lines, and for the two new circles absorbing these three extra superintendents.

43. As respects assistant superintendents, I propose increasing the number in this rank by one.

The number sanctioned under the re-organization scheme was 10, subsequently increased to 13 by the appointment of three supernumerary assistant superintendents under sanction of Home Office No. 2 of the 2nd January 1864. It will not be necessary to provide an assistant superintendent for Ceylon, and therefore the number necessary for circle duty will be 12 only; but I think it is very desirable to provide an officer of this rank for duty in my own office, as well as one for the store branch, the work in which is heavier than either Captain Mallock, or the present officiating superintendent, can do justice to.

44. As respects inspectors. Under the re-organization the number of this rank was as follows:

	Number.
1st grade - - - - -	20
2nd „ - - - - -	30
3rd „ - - - - -	40
4th „ - - - - -	10
Total - - -	100

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Since the date of sanction to this establishment, the extent of the lines of the department, calculated as they will stand at the beginning of next official year, will have increased from 11,030 to 14,170 miles, or by 28·45 per cent.; and were the number of inspectors proportionally increased, the total of this rank would now be 128. Instead, however, of increasing the inspector's rank to 128, I propose retaining it at its present strength, viz., 90 in the first three grades, absorbing those at present in the 4th grade, into a new rank, viz., that of overseer, for the reasons mentioned in my No. 2 of the 1st May 1863, and employing the money economized by the limitation of numbers in the inspector's rank, as above, in the payment of the overseers, so far as it will go.

45. As respects signallers. The strength of the department in this rank, as sanctioned for the department under the re-organization was as follows:

Europeans or East Indians	-	-	-	-	-	660
Natives	-	-	-	-	-	160
Total						820

being at an average of 581 per office. Since that period the number of offices has been increased from 141 to 171, a number, which, on the completion of the Assam lines, probably by the 1st of May, will have been increased to 175. The strength proper for the signalling establishment, based on the proportion per office existing in 1861, would, therefore, be 1,018. I propose to limit it to 1,000.

46. Passing now to salaries, I consider that a general increase in the salaries of all ranks, from director downwards, is desirable.

47. The establishment of directors consists of three officers: the senior, Lieutenant Colonel Stewart, being on 1,500 rupees per month; the two juniors, Captain R. Murray and Mr. J. T. Blissett, being on 1,000 rupees each.* Both these officers are, I think, for the positions they hold, inadequately paid in comparison with officers holding appointments of similar importance and responsibility in other branches of the public service; and I would suggest that in each case the maximum pay of a junior director should be raised from 1,000 to 1,200 rupees, commencing with 800 rupees a month, instead of 700 rupees, as at present, the increases being by annual steps of 100 rupees each, instead of 50 rupees as at present. Colonel Stewart has never joined his appointment as senior director, and it is not at all reasonable to expect that he will ever do so; and in consequence of his absence, Mr. Galbraith has officiated in the Western Division now for more than two years on a salary actually less by 25 rupees than he would have been drawing had he retained circle charge. I trust therefore that, in justice to this very deserving officer, he may be placed on the full salary of a junior director. His case has already been detailed in my No. 870 of the 29th July 1863.

48. At present the highest rate of pay in the rank of superintendent is 700 rupees. This I consider sufficient; but I would suggest that the lowest rate, at present 350 rupees, should be raised to 500 rupees. The numbers on each rate of pay now, and as I would recommend, are as follows:

<i>At present.</i>				<i>Recommended.</i>			
One	-	-	on Rupees 700	Three	-	-	on Rupees 700
Two	-	-	" 600	Five	-	-	" 600
Four	-	-	" 500	Seven	-	-	" 500
Five	-	-	" 400				
Three	-	-	" 350				

49. The pay of the rank of assistant superintendent, at present 300 rupees, I would increase to 400 rupees; and that of the three grades in the inspector's rank, at present 250, 200, and 150 rupees, I would increase to 350, 300, and 250 rupees respectively. I had intended recommending that the pay in these grades should be 300, 250, and 200 rupees, but when it is considered that the full salary, if sanctioned, will only be drawn conditionally on the passing of certain tests of qualification, I think the Government may congratulate itself if the full amount, as now recommended, should be expended.

50. Hitherto, if I may except the 4th inspector's grade, the designation of which grade was, under sanction of Home Office, No. 4789 of the 28th September 1863, changed to overseer, there has been no rank of European officer below that of inspector, with an exception to be mentioned; and, as a consequence, when the services of men of a lower class have been required for line construction, it has been necessary to employ them temporarily, paying them out of the estimate for the construction, and dismissing them on the construction being completed. The exception I have referred to is that of certain "artificers," as they were then termed, who it was intended to dismiss at the time of the re-organisation, but whose dismissal was not then found possible, because the full complement

* The pay of a junior director commences on 700 rupees a month, rising by 50 rupees a year to the maximum of 1,000 rupees. Mr. Blissett, under this arrangement, now draws 800 rupees; but Captain Murray is at present drawing a staff salary of 700 rupees, under Home Office, No. 3813 of 17th June 1864, which will rise by 100 rupees a year, so long as he continues to officiate for Colonel Stewart, until the maximum salary of a senior director, viz., 1,500 rupees, is attained. The maximum pay of his substantive appointment is, however, 1,000 rupees, consolidated pay.

ment of sanctioned inspectors was not at that time complete; and as these artificers had rendered good service to the department, they were retained to supplement the deficiency in the inspector grades. The number of this class at present in the department is 29, which number I propose including in the overseer rank, increasing the number in that rank to 40, and dividing them into three grades, on 150, 120, and 100 rupees per month, the number in each grade being 10, 10, and 20, respectively.

51. There were then also 13 natives holding appointments as artificers. This number I propose increasing under the new designation of native overseer, to 20, on salaries at half the rates given to European overseers, viz., 75, 60, and 50 rupees, the number in each grade being 5, 5, and 10, respectively.

52. I have now to consider what improvement in the rate of pay to the Signalling Branch is desirable. That some improvement is, in the interests of the department, required is, I think, conclusively shown from the following facts:

53. The total number of persons in this branch was on the 31st July last, that is to say approximately, in the middle of last calendar year, 814; of which number 129 were probationers, that is to say, signallers under tuition who had never joined office, leaving 685 as the total number of working signallers.

54. The number of casualties in this number, during the calendar year just ended, has been as follows:

From deaths	-	-	-	-	-	-	-	-	8
From resignations	-	-	-	-	-	-	-	-	51
From dismissals and services dispensed with	-	-	-	-	-	-	-	-	53
And from desertions	-	-	-	-	-	-	-	-	6

55. Omitting the item of deaths, the total number of casualties has been 110, equal to 16·06 per cent., or to the 1-6·23rd part of the whole, and had probationers been included in the total the casualties from causes other than death would have risen to 139, or to 17·08 per cent.

56. In the detail of casualties I have included native signallers, as well as European, and East Indians; but the number of casualties among the native signallers is comparatively small; their number is also small, so that casualties occurring amongst them cause comparatively little inconvenience, and if these are omitted the casualties among the European and East Indian signallers, from the various causes mentioned, are as follow:—

From death	-	-	-	-	-	-	-	-	7
From resignation	-	-	-	-	-	-	-	-	42
From dismissal and services dispensed with	-	-	-	-	-	-	-	-	49
From desertions	-	-	-	-	-	-	-	-	6

Omitting the item of deaths, the total number of casualties equals 97 on a total of 605, or 16·03 per cent.

57. The present rates of pay may, from the number of dismissals, be perhaps assumed as insufficient to attract the better specimens of the classes from which our signallers are drawn, and certainly as insufficient to retain in the department such as have qualifications fitting them for employment in other better-paid paths of life.

58. The proportion of casualties amongst the European and East Indian signallers, from causes other than death, in the various circles, is distributed as follows:

1. Dacca	-	-	-	-	6	in	18	=	33·33	per cent. or	1-3rd.
2. Bombay	-	-	-	-	23	„	78	=	29·48	„	1-3·39th.
3. Indore	-	-	-	-	5	„	22	=	22·72	„	1-4·4th.
4. Punjab	-	-	-	-	14	„	84	=	16·67	„	1-6th.
5. Madras	-	-	-	-	14	„	85	=	16·47	„	1-6·07th.
6. Bengal	-	-	-	-	20	„	123	=	16·26	„	1-6·15th.
7. Central India	-	-	-	-	6	„	55	=	10·91	„	1-9·16th.
8. Scind	-	-	-	-	2	„	33	=	6·06	„	1-16·50th.
9. East Coast	-	-	-	-	4	„	72	=	5·56	„	1-18th.
10. Pegu	-	-	-	-	1	„	35	=	2·86	„	1-35th.

59. From the above it will be seen, that, from whatever causes, the signallers of the Dacca Circle are in process of entire change in every three years, those of the Bombay Circle in about three-and-a-half years, and those of the Indore Circle in rather under four-and-a-half years. Now, as a service of at least two years is required to complete the training of a signaller, and a service of five years to render him in all points thoroughly efficient, it is obvious that no great efficiency can be expected in those three circles under such adverse circumstances,

60. The great disproportion in the per-centages of casualties in the various circles, may I think be accounted for by local surroundings. The Dacca Circle, where the heaviest per-centage of casualties exists, has a bad character from its reputed unhealthiness; and instances have occurred of resignations in that circle having been withdrawn, on the promise of transfer to some other circle.

61. In the Bombay, Punjab, Madras, and Bengal Circles, the better educated and more intelligent signallers obtain better paid employment in the police, and in the various openings that are constantly occurring, owing to the great developement of public works and private enterprise throughout India, which creates a demand for just the class of young men composing our signalling branch.

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62. The proportion of casualties in the Scind and East Coast Circles from the cause just mentioned is comparatively small, but in Scind no public works of any importance are at present, I believe, in progress; and in the East Coast the only competitor for the services of our signallers is the Irrigation Company; further, both circles are separated from the more active commercial areas by considerable extents of country which cannot be traversed, except at an expense too considerable to be worth the while, on the chance merely of obtaining better paid employment, for it is rather through offers of higher pay on the spot, than from any contingent expectation of benefit at a distance, that the resignations of signallers occur.

63. There are not in Pegu any great public works in progress, nor has any sudden great expansion of trade occurred as in Bombay, and there are besides obstacles to a removal from the district, all of which circumstances have doubtless had their effect in keeping the proportion of casualty low; but I am very sure that the grant in 1861 of a local allowance has had a large share in the result. There is no longer now, as before the grant, the dissatisfaction with the service, and the consequent misconduct of the signallers and constant endeavour to be sent back to India; and I think that were this measure of a local allowance sanctioned to circles, in the form of full or three-quarters or other fractions of the Pegu scale of local allowance, the scale being as it were slid up or down, as the necessities of circles might appear to require; and if in some cases a main line allowance were also given, the position of the signallers could probably be improved to the extent required, at less cost than by any other scheme that occurs to me.

64. It must be remembered that the better pay I have proposed, does not mean a higher price for the same article, but the means of commanding a better article, and in obtaining from even the same article a more efficient service, that an increase in the pay of the signallers may not necessarily mean an increase in the total expenditure of this nature in the proportion of the increase, but an increase in the pay of that smaller number only of signallers; who, with better pay, would be content to carry on the work efficiently. In fact, it means efficiency in a greater proportion than is measured by the proportional increase in the money payment.

65. There is, however, another improvement in the position of signallers, which is, I think, most desirable to insure efficiency. It is known to the Government that in the majority of offices the work is continuous; now to see that this work is efficiently performed, there is an assistant in charge, who, as a remuneration for the responsibilities of office charge, pecuniary and otherwise, has, what is termed an office allowance, the allowance ranging from 75 rupees, in the offices in Calcutta and Bombay, to 16 rupees, as in some of the minor offices. It is obviously impossible that the assistant in charge who draws this allowance can personally superintend the work of the office for more than one-half of the 24 hours, and he thus leaves the responsible charge for the remaining 12 hours to a signaller, who, for his extra trouble and responsibility, and liability to fine, has no special reward. It is certainly desirable that these deputy assistants, as they may conveniently be termed, should receive some remuneration, that it may be an object to undertake this responsibility, instead of being, as at present, an object to avoid it. I would, therefore, in general terms, propose that the present office allowances, the majority of which were fixed in 1859, should be revised and better proportioned than now to the relative responsibilities of office charge, and that an allowance equal to half of that drawn by the assistant in charge should be given to his deputy in all continuous service offices. Such revision must, however, form the subject of a separate reference.

66. The present sanctioned monthly payment to assistants in charge of offices under the head of "office allowance," and the increase I consider to be now required, are as follows:—

	No.	Rs.
Total number of offices, the allowances of which were sanctioned by Government in December 1859 - - - - -	146	4,635
Deduct—Allowances of offices subsequently closed - - - - -	29	1,240
Present number of offices, the allowances of which were sanctioned by Government in 1859 - - - - -	117	3,395
Offices, the allowances of which were sanctioned by the Director General, and by the Director, Eastern Division, subsequent to 1859 - - - - -	13	260
Total of offices now drawing the allowance, and of allowances drawn - - - - -	130	3,655
Offices for which no allowance has yet been sanctioned, but the allowances of which may be roughly estimated at an average of 30 rupees each - - - - -	51	1,530
Total of the offices which should draw the allowance, and of the amount which should be drawn - - - - -	181	5,185
Deduct—Amount sanctioned by Government in December 1859, as mentioned above - - - - -		4,635
Difference or approximate amount now required in excess of sanction of 1859 - - - - -		550

67. Assuming that three-fourths of the offices at present open are open for continuous service, and that to the allowances for these offices one-half more is added as remuneration to the deputy assistant, then the total increase under this head will be 2,494 rupees, as follows:—

	Rs.
Approximate amount of office allowance required as above for assistants in charge - - - - -	5,185
Half ditto to deputy assistants, for three-fourths of the offices in the department - - - - -	1,945
Total office allowance required both for assistants and for deputy assistant	7,130
Deduct amount sanctioned in 1859 - - - - -	4,635
Difference or approximate total increase now required - - -	2,495

68. What measure of increase may be necessary towards the joint objects of securing a better class of signallers, and of inducing such when obtained to select the department, not as a temporary means of livelihood, but as an employment for life, cannot be estimated from any *a priori* considerations. The process of increase must be a tentative one; for the present, and probably also for the next two years, I consider that a total increase at the rate of about 20 per cent. on the present sanctioned expenditure in the salaries of this branch of the department would suffice. The present authorised strength of the department in signallers is 820, on an aggregate salary of 36,745 rupees, which, increased by 20 per cent., would raise the expenditure under this head to 44,094 rupees; and if the number is increased from 820, as at present sanctioned, to 1,000, as proposed in paragraph 45, and if the pay is also increased in like proportion, then the total expenditure under this head will become 53,774 rupees.

69. Assuming the pay and number of ministerial officers and of menial servants to remain unchanged, then the increase of monthly expenditure, arising out of the increases I have proposed, will be as follows:—

	Rs.
Increase in the pay of two directors - - - - -	400
„ „ the superintendents - - - - -	1,650
„ „ the assistant superintendents - - - - -	1,700
Increase in the pay of the inspectors composing the present authorised establishment* - - - - -	8,000
Increase in the pay of the European and East Indian overseers now in the department; also pay of the number I have proposed to add to it - - - - -	2,206
Increase in the pay of the native overseers now in the department, and pay of the number I have proposed to add to it - - - - -	555
Increase in the pay and number of signallers - - - - -	17,029
Increase under the head Office Allowance - - - - -	2,495
TOTAL - - -	34,035

Now the present income of the department, as calculated for the official year just ending, is - - - - -	9,36,000
And the present working expenses of all natures - - - - -	14,23,000
Leaving a deficit of 52,08, or - - - - -	4,87,000

which is equivalent to 40,583 rupees monthly.

Including this deficit, the sum additional to present monthly expenditure for which provision must be made is about 74,618 rupees.

70. The Government letter under reply propose, as a means for meeting an increased expenditure, an increase in the charges on messages; and there may, perhaps, be other indirect modes of increasing the departmental revenue from messages, such as the simplification of the rules and rates of charge, and their publication and extensive circulation, provision for obtaining an acknowledgment of the arrival of a message at moderate cost, the greater extension of the system of telegraph stamps, and possibly the construction of some short lines, such as those to Muttra and Hingunghat, as suggested in my No. 3,890 of the 8th April 1864.

71. If to these means be added a reduction in the number of unremunerative offices such as that at Loodiana, which collects 7 rupees and expends 67 rupees, and if the number of continuous service offices is reduced, as with improved insulation would be possible, then the raising of revenue to the level of expenditure might be effected without so heavy an increase in the charges on messages as would without these aids be wanted.

72. I now proceed to point out what changes are desirable in the existing rules of the department respecting messages.

73. It

* On the assumption that the pay drawn during the coming year will be, on an average, a mean between the present rate and proposed maximum rate.

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73. It is known that, in those rules, certain words in the address are sent free; that the unit of number for charge is the single word, and that the unit of distance is 400 miles; that no advantage is given to the sender of a message over a long distance, although such can be sent at a relatively less cost to the department than is involved in messages over short distances. It is also known that portorage is not paid by the sender but by the receiver.

74. In what immediately follows, several points for consideration must be taken up, not in connection with any specific method of charge, but separately, for some are applicable to one system of charge but not to another.

75. As respects the method of charge, I would propose to count for charge every word except, in the address, the words "To" and "From," and the name of the "Station from"; thus assimilating the counting to what is in use on the Indo-European line, and on the lines worked in accordance with the rules of the Brussels Convention.

76. As respects the unit of number of words for charge, the present system of charging by the word does not lend itself to other than very coarse changes in the rates, for the present charge could not be conveniently raised otherwise than from one anna to one and a half, or two annas, per word per 400 miles; and the difficulty of modifying the existing rates thus arising becomes very much increased, when, instead of a distance unit of 400 miles, such smaller unit as 100 miles is adopted.

77. I would, therefore, propose to substitute the system of charging by groups of words, a system common to almost all the lines in the world, except those of India; and I would adopt the group of 20 used by the telegraphs working under the rules of the Brussels Convention, but I would so far modify that system as to permit of the receipt of a message being acknowledged, if limited to 10 words, at a half rate charge. Considering the uncertainty of the telegraph, and the importance of the interests entrusted to it, such a modification as that just proposed would be certain of proving satisfactory to the public.

78. The unit of distance in India is 400 miles, and the charge is for successive integer multiples of that unit, giving consequently no advantage to messages over long distances. In this latter respect the system of charge is opposed alike to the practice of most telegraph systems, including those working under the Brussels Convention, as to equitable treatment of the sender.

79. It will be understood that there are certain fixed departmental expenses common to all messages alike, whatever their length or the distances over which they have to be conveyed, such, for instance, as the one I have mentioned for portorage, the cost of registering at the receiving and delivering offices, as well as charges which must be incurred in order that the sender may, if he choose, ascertain and prove the delivery of his message, there are also the costs of establishments for checking the receipts on messages, and for attending to inquiries and complaints respecting them; and there are besides certain words equally required in all messages, such as departmental instructions, the office date which under Government orders has for the past three years been given free to the sender, &c. The effect of these fixed expenses common to all messages is, to render the transmission of messages over long distances proportionally more profitable than those over shorter ones, if the charge for distance is proportioned to the distance.

80. As a reasonable concession, therefore, to senders over the longer distances, it is the practice generally in Europe to charge by a scale in which, for each successive equal increase of charge, a successively increasing interval of distance is covered. Thus, under the Brussels Convention, the charges for distance, and the successive distances covered by each successive rupee of charge, are pretty closely as follow:—

Charge per 20 words, in rupees	-	-	1	2	3	4	5	6
Corresponding distances, in kilometers *	-	-	75	190	340	525	750	1,015
Successive distances in kilometers covered by each successive rupee of charge	-	-	75	115	150	185	225	265

81. The only objection that could reasonably be offered to this system of charge for distance is, that the sender has no simple rule by which to calculate the cost of his message as affected by the distance over which it is to be conveyed, but such an objection is more apparent than real, for the distance in miles, the basis of the present system of charge, can rarely be known to the sender; and the tables, to which he must consequently in such cases refer, may as well tell him the money charge on a message of 20 words between the places, as the number of single rates given in the polymetric tables under the present system.

82. The system, however, renders polymetric tables imperative; but these have the convenience of permitting of the rates of charge along the various lines being varied with reference to the traffic on them, a lower rate being levied on messages along fully worked main lines, as that to Bombay,† than on such scantily employed lines as that between Lahore and Peshawur.

83. Should

* The kilometer, equal to 62-100ths of a mile, or nearly 5-8ths of a mile.

† Omitting all charges for general superintendence, and all interest on block, the returns are, on the main line between Calcutta and Bombay, 100-2 per cent. on the working expenses.

83. Should it, however, be considered desirable to retain the present system of charge for distance unchanged, this might be done, with some fairness to the senders over the longer distances, by levying, in addition to the charges for length of messages and distance, a fixed pay of one or two rupees.

84. When this principle of charge first suggested itself to me I had no stronger justification for the innovation than its obvious fairness; but it was suggested that the public might reasonably object to a method of charge which, on every message, levied a fixed fee of one or two rupees, besides a distinct charge for number of words and distance. The amount which occurred to me as suitable for this latter charge was four annas per every 100 miles of distance, on a message of 20 words.

85. In reality, however, the adoption of a minimum distance of 400 miles, and I may add, that of a minimum number of words as 20, although messages might frequently be sent in fewer words, is an embodiment of the same principle; but I have since found that a direct charge of a fee on every message was the practice of the French Government lines in 1861, and probably still continues so. The charge in France on a message of 20 words, consisting of a constant fee equivalent to 0-1-34 rupees, and of a variable charge equivalent to 0-10-8 rupees, per 100 miles of distance.

86. Under the system just proposed a much smaller unit than the present, such as 100 miles, may be chosen for distance. Taking, as examples of the application of this system, the cases of Burdwan and Benares, the one under 100 and the other 400 miles from Calcutta; the cost of a message from Calcutta to each of those places is, under the present system alike, namely, one rupee; but under the system above suggested, the cost, with a one rupee fee and a four anna charge for every 20 words, would be, in the first case, 1-4 rupees, and in the second case 2-4 rupees; both more in proportion to the service done than are those under the present system.

87. The present system of taking the distances for charge, as that by the direct line between the places, is unjust to the department. As well might the charge by railway be similarly regulated. The charge should certainly be in accordance with the shortest distances along the telegraph lines, by which it is possible to convey the message.

88. Hitherto no charge has been made for the delivery of messages, unless in cases where the delivery was at a distance exceeding two miles from the telegraph office; the charges for distances in excess of two miles being for the excess only. Practically this was equivalent to the delivery of the majority of messages at the cost of the department. The practice was copied from what is customary in Europe, and doubtless arose from the difficulty in collecting small sums for portage from the receiver. The charge of the East Indian Railway Company for delivering a message is, if over half a mile from the telegraph office, two annas per mile, according to distance. Messages are only delivered free under half a mile of the telegraph office. In the rules of the Brussels Convention, which regulates the traffic on the Indo-European line, the delivery of messages at distances not over one mile is free, but beyond that distance the charge is at the rate of eight annas per mile, up to five miles, beyond which messages are not conveyed by the telegraph porters.

89. The trouble of collecting portage charges, and of ensuring their being properly accounted for by peons, would be escaped by making a charge of say four annas for portage, a standard item in every bill, whatever the distance, which can rarely be known at the office of original despatch. In the event of the distance exceeding five miles, which will rarely happen, the sending-out office should then levy a charge upon the receiver of the message of two annas for each mile beyond five miles. As the total number of messages during the past calendar year was 316,753, the profits from the pre-payment of portage alone may be expected to amount to nearly 8,000 rupees monthly.

90. The existing deficit on the working of the department has been taken at 40,583 rupees per month. If to this is added 34,035 rupees on account of the increase in numbers and salaries which I have proposed, then the total sum to be made good monthly by increased charges on messages is 74,618 rupees.

91. The question now arises, how much of this deficit should be covered by additional charges on messages. It might, at first sight, be assumed as just that the public generally who use the telegraph should be required, by a proper scale of charge, to relieve the general public of India from all burdens for its support; but, in reality, the telegraph has not been constructed in view to meet solely the convenience of the public, a large number of offices having been opened in various parts of India for purposes of pure Government. I may mention the offices temporarily opened at the various temporary head quarters of Government, as Darjeeling, Murree, Parell, Malabar Point, Dapoorie, and those at the various civil and military stations, all of which are, I think, a fair charge on the general finances of the country.

92. The deficiency of departmental income, therefore, to be made good ought not, as it appears to me, to be the whole sum by which the departmental income falls short of its expenses, but a portion only of this. Leaving this consideration, however, aside, and assuming that it is desired that the full amount of the deficiency shall be made good by the increased revenue derived directly from messages, then, as the present monthly receipts

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from messages are 78,000, these must be increased by 74,618 rupees, or by 95·66 per cent.

93. That the charges on messages might be reasonably increased is evident from the following considerations. The cost of materials, owing to the distance from Europe, whence all our stores are obtained, and the expense of conveyance consequent on the general absence of railways, is, at the working points, certainly 50 per cent. in excess of the cost of such stores in Europe. The extent of line, as compared with the business done over it, is probably tenfold what it is in Europe generally (excluding Russia, and countries in a similarly backward state). In England and Belgium the average distance between contiguous offices is 10 and 11 miles respectively; and, of course, these offices are all profitable, or at least self-supporting, for there is no telegraph necessity for such close neighbourhood. In this country the distances of paying offices apart is constantly in excess of that which, with our present arrangements, we can cover without the aid of an intermediate office as a pure telegraph necessity, and a burden on the finances of the department. I may instance Dehree, which I succeeded last year in dispensing with, and Burhee, which it is still necessary to retain; and even were we able electrically to dispense with such intermediate offices, the difficulties of communication in many parts of India—travelling being possible on the East Coast, for instance, during the rains, at the rate of only one and a half miles an hour—renders it desirable to shorten the distance to be passed over by the Line Conservancy, in view to quicker restoration of communication after an interruption.

94. As to the extent to which such increase of charge might reasonably be carried, this may be, perhaps, most satisfactorily measured by a comparison of the present Indian charges with those of other countries. The present charge on a message of 16 words nominal, but of probably 20 words actual, the words in the address being counted, if sent from Calcutta to Bombay, a direct distance of 980 miles, but a line distance of 1,573 miles, is three rupees; or at the rate of three annas and 0·6 pie for 20 words, all counted, per 100 miles of line. The cost of a similar message from Calcutta to Benares, a direct distance of 400 miles, but a line distance of 420 miles, is three annas and 9·7 pie per 20 words per 100 miles of line distance.

95. In England the charge is on a message of 20 words, with 10 words allowed free as address. This may be taken as equivalent generally to something under 30 words; assuming, however, a length of 30 words, then the proportional cost on a message of 20 words, the shilling being taken at eight annas, was, according to the "Telegraph Guide" of February 1863, as follows:

Distances in miles	-	-	50	100	150	200	300	400
Charges in rupees	-	-	0·333.	0·500.	0·666.	0·833.	1·000.	1·333.

96. In France the charge is on a message of 20 words, address inclusive; and consists of a fee of two francs with a charge of 1-10th franc for every miriameter. Taking the franc as 5-12ths of a rupee, and the miriameter as 6·2 miles, these charges, reduced to miles and rupees, are as follow:

Distances in miles	-	-	40	100	150	200	300	400
Charges in rupees	-	-	1·16.	1·50.	1·83.	2·16.	2·83.	3·50.

97. Under the Convention between Prussia, Belgium, and France, signed at Brussels on the 30th June 1858, and still, I believe, in force, the charges on a message of 20 words, reduced to miles and rupees, are as follow:—

Miles	-	62	155	279	434	620	837	1,085	1,364	1,674	2,015
Rupees	-	0·625	1·250	1·875	2·500	3·125	5·750	4·375	5·000	5·625	6·25

98. In Russia, the minimum message is of 30 words, including the address; and the proportional rates reduced to 20 words, and to rupees and miles, are as follow:—

Miles	-	-	-	46 $\frac{1}{2}$	118	211	335	480 $\frac{1}{2}$	620
Rupees	-	-	-	0·94	0·88	2·83	3·77	4·72	5·66

99. In America, the charges on messages are chiefly influenced by the rate of salaries paid to the signallers, and by the amount of business done on the lines; and it is stated by Shaffner ("Telegraph Manual," page 758), that few lines can pay any dividend out of the local traffic, depending for this on the through business only. In the New England States, the pay of signallers ranges from 26 rupees to 43 rupees per month; whereas in the Southern States the pay is from 43 rupees to 65 rupees, and the materials of the lines are also dearer in the Southern than in the Northern States.

100. I have not been able to ascertain the American rates, except in a few cases; as examples of the lowest rates, I may mention that the cost of a message of 20 words, including address, from New York to Boston, a distance of 240 miles, is 0·40 dollars; from New York to Washington, a distance also of 240 miles, 0·50 dollars; and from New York to Pittsburgh, 350 miles, 0·75 dollars. All these are in the Northern States.

101. In the Southern states, the rates are, from New Orleans to Jackson, 190 miles, 0.75 dollars; New Orleans to Savannah, 650 miles, 1.40 dollars; New Orleans to Louisville, 720 miles, 1.40 dollars. Reduced at 2 rupees per dollar, these rates are—

In the Northern States :

Miles	-	-	-	-	-	-	-	-	240	350
Rupees	-	-	-	-	-	-	-	-	0.8 to 1.0	1-12-10
and 0-12-10 to 1-0-0										

In the Southern States :

Miles	-	-	-	-	-	-	190	650	720
Rupees	-	-	-	-	-	-	1-8-0	2-12-10	2-12-10

102. The rates on messages of 20 words by the new Indo-European lines are as follow:—

IN INDIA :

From Kurrachee

	To Bombay.	To Calcutta.	To Rangoon.
Miles -	870	1,720	2,643
Rupees -	4-12-0	4-12-0	6-12-0

IN ASIATIC TURKEY :

Miles	-	-	400	703	959	1,214	1,462	1,737
Rupees	-	-	4-13-0	6-0-0	7-4-0	8-7-0	9-10-0	11-0-0

IN PERSIA :

Miles	-	-	-	160	413	666	913	1,113
Rupees	-	-	-	1-4-0	2-12-0	4-4-0	6-0-0	8-0-0

103. From what precedes, a good general idea may be obtained of the comparative rates of charge on very variously circumstanced lines. To assist in giving a clearer idea on this subject, the preceding information has been exhibited by diagram in Appendix (F).

104. From the diagrams, it will be seen that, accepting the preceding data as correct, the Indian telegraph is the cheapest in the world.

105. A comparison of its rates with those of the European lines working under the Brussels Convention proves that, in general terms, the Indian rates, up to 800 or 1,000 miles, might be at least doubled, and still be as low as those of the lines in question.

106. In paragraph 92, it was shown that, to place the income of the departments on a level with its expenditure, the returns from messages must be increased by 72,300 rupees, or by 92.70 per cent.

107. Three methods have been sketched out under which the increased charges might be regulated. The first is that in present force on the Government lines in India; and under it the increased charges might be at once brought into operation, it being merely necessary to direct that, from the date fixed on, the charges for distance shall be levied on every 200 miles, instead of every 400 miles, as at present. A charge of four annas on every message for portorage might also, perhaps, be levied. As the method of charge just sketched is, as I have shown, radically defective, I would suggest that its introduction should be temporary, and pending the arrangement of some more perfect system.

108. The second method of charge is that in use on the French lines, viz., a fixed fee on the message, with an additional payment regulated according to distance. Were this system adopted, I would fix the amount of the fee at two rupees, and the distance charge at four annas for every 100 miles; but as the proportional increase would, on the above scale of charge, fall materially short of what is required, it would be proper to levy the charge for distance not on the direct distance, as at present, but on the distance as measured along the line; and even under this modification of the system, and assuming the increase in rates to occasion no decrease either on the number or in the average length of messages, the income produced will fall short by about $1\frac{1}{2}$ per cent. of what has been assumed as necessary.

109. This system does not, like the first, recommend itself as being capable of immediate introduction, as it involves the preparation either of maps with the mileage between the various telegraph offices entered, or of polymetric tables; nor is it so equitable to the sender as the one which follows; but it has the doubtful advantage over this last of per-

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mitting a sender himself to calculate the cost of his message, with the aid only of a map of the telegraph lines.

110. The third, and by far the most perfect method of regulating charges, is that described in paragraph 80, in which an advantage is given to messages over the longer distances; but the method renders tables of the rates from every telegraph office to every other indispensable; and these could not, I think, be prepared and circulated to signal offices in less than three months, comprising, as they would do, 36,000 entries.

111. The amount of fixed fee, and of variable charge for distance, to be levied under the second of the preceding systems, was ascertained after a detailed examination of all the messages passed through the department during a particular day; but it is not possible to make any such estimate as respects the third mode of charging until after the normal rates for distance on lines in average work have been fixed, and the proportional increases or decreases on these normal rates, to meet the circumstance of scantily used lines, as those in Assam, or of those fully employed, as the lines from Bombay to Calcutta and Kurrachee, have been decided on.

112. To give, however, a general idea of the scale I should be disposed to recommend, I have drawn it on the sheet of diagrams as an interrupted line.

113. The curve adopted is that of the common parabola; and it will be seen to give rates somewhat larger than, but very similarly proportioned to, those of the Brussels Convention; and it would be easy, by means of a constant multiplier, to increase these rates, to meet the case of scantily used lines; and similarly, by a divisor, to decrease the rates, to meet the opposite case.

114. I may as well, perhaps, mention that my reason for selecting this curve as that for exhibiting the rates was in view to the ease with which the rates may be taken from a table of the square roots of numbers; for if we take the series of common numbers, 1, 2, 3, &c., and consider them as representing 100, 200, 300, &c., miles of distance, we have in the square roots of these numbers the ordinates of curve representing the rates; and it was in this manner that the curve of rates shown in the diagram was laid down. I mention this, because where a very large number of rates are to be ascertained, it is of great importance to have a method of determining them which is sufficiently simple to be employed by an ordinary clerk; and which, by permitting of the use of existing printed tables, saves all the labour and risk of error which calculations without such assistance involve. I am here assuming that the rates will be given, not for the nearest 100 miles, but for the exact distance between the places.

I have, &c.

(signed) *C. Douglas*, Lieut.-Colonel,
Director General of Telegraphs in India.

From Lieutenant Colonel *C. Douglas*, Director General of Telegraphs in India, to *E. C. Bayley*, Esq., Secretary to the Government of India (No. 269); dated 23 May 1865.

Captain R. Murray, Director of Telegraphs, Eastern Division.
J. T. Blisset, Esq., Director of Telegraphs, Southern Division.
C. Galbraith, Esq., Officiating Director of Telegraphs, Western Division.
B. C. Bailey, Esq., Superintendent of Telegraphs, East Coast Circle.
J. H. Lane, Esq., Superintendent of Telegraphs, Bengal Circle.

IN continuation of my No. 2939, of the 1st February last, I forward the confidential reports of the officers noted in the margin.

2. These reports will give the Government of India the opportunity of forming its

own opinion of what changes in the constitution and system of the department are, in the opinion of some of its ablest officers, desirable.

3. The reports were furnished in reply to an endorsement on copy of Home Office, No. 1344, of the 13th July 1864, a copy of which is given below.

“*Confidential*.—The Director General will be glad to receive your early opinion on this important reference. The utmost freedom of discussion is invited.”

From Captain *R. Murray*, Director of Telegraphs, Officiating Eastern Division, to Lieutenant Colonel *C. Douglas*, Director General of Telegraphs in India (No. 63-969); dated 31 August 1864.

I HAVE to acknowledge the receipt of your docket, No. 981, dated 27th July 1864, forwarding copy of letter, No. 1344, dated Simla, 13th July 1864, from the Secretary to the Government of India, in the Home Department, and requesting my opinion on the important reference in it made.

2. In discussing the several points of the Government Letter, No. 1344, I think it will be convenient to treat of them under the following heads:—

(I.) The present defective and inefficient working of the Department, the causes of it, and the measures necessary to remedy and remove the existing defects and evils, and to attain the desired efficient working of it.

(II.) Whether a closer and more effective supervision of lines and offices would produce results which could not be otherwise obtained, except at considerably greater expense.

(III.) The abolition of the grade of director with a re-engagement and greater number of smaller circles under the charge of superintendents on higher rates of pay vested with increased powers, and directly under and responsible to the head of the department.

(IV.) The means of providing for the additional expenditure on account of the increased number of superintendents with higher salaries either by reduction in other directions or by increasing the scale of charges.

3. The present working of the department is inefficient and not satisfactory. The causes of its being so are: first, the existing very bad state of many sections of the lines; secondly, the inefficiency and insufficiency of the signalling establishment; and, thirdly, in some instances the want of a stricter supervision by superintendents and assistant superintendents of the working of the offices.

4. Up to the present date many sections of the lines of the department have not been constructed in a permanent manner; most of them are still not insulated. Till they are permanently constructed and efficiently insulated, the working of the department will not be efficient or satisfactory. As an illustration, I will instance the present state of the main lines of the Punjab Circle. From Agra to Umritsur the lines are constructed with Hamilton's three-quarter standards unfortunately provided with English top pieces (except on the section Delhi to Kurnaul which has country-made top pieces), and all insulated as far as Umballah with Brooke insulators attached to the top pieces by means of the cast iron caps. All the English top pieces are unserviceable from dry rot and the ravages of the white ants, which appear to have a particular partiality to the beech wood, of which the tops are chiefly composed, and are so frequently breaking that no reliance can be placed on the lines. The caps, as a means of attaching the insulators to the standards, are wholly unsuited for the purpose, and so inefficient that the insulators fall out of them with very little vibrations of the wire, allowing the wire to come in contact with the iron standards, thereby causing an interruption, or at least imperfect communication, till the line rider from the office on either side arrives at the spot and replaces the wire on the post. The utter inefficiency and uselessness of the caps have been so thoroughly proved, that the employment of them as a means of attaching the insulators to the posts has very wisely been directed to be discontinued.

5. New teak top pieces and brackets for carrying the insulators for this division of the circle are now in the course of distribution, and I see no reason why the line from Agra to Umritsur should not be in a thoroughly efficient state before the 1st of January 1865.

6. Of the sections of the lines of the Punjab Circle to the north-west and south-west of Umritsur it may be stated that they are generally unserviceable in consequence of the decayed and ant-eaten condition of the fir posts supporting the wire. These supports have in most instances been spliced and replanted oftener than once, are now nearly useless, and when it rains, become so saturated that almost all the current escapes, thus causing imperfect communication, with its accompaniment bad and difficult working, if not interruptions. The supports on the line from Lahore to Mooltan are literally rotten. For the reconstruction of these lines, Hamilton's three-quarter standards, with Brooke insulators and caps were indented for in January 1863, but in consequence of the arrangements made for their carriage from Bombay to Mooltan, the last of them are now only arriving at Mooltan. Top pieces of babool obtained on the spot, and brackets for carrying the insulators, are being provided for these lines. Every exertion is being made to have the lines beyond Umritsur reconstructed and insulated during next working season, and I am sanguine about having them all in good order before next rains.

7. If other circles of the department stand as much in need of permanent reconstruction

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tion and insulation as the Punjab Circle, it is not difficult to arrive at the chief and primary cause of the present inefficient and not satisfactory working of the department.

8. I have entered into this comparatively lengthened statement of the lines of the Punjab Circle chiefly as an example of how much remains to be effected before satisfactory or efficient working can be expected. That good and satisfactory working may be looked for and attained when the lines are permanently constructed and efficiently insulated is proved by the fact that since the line, Calcutta to Agra, has been permanently constructed and insulated, though not in a thoroughly efficient manner, the interruptions have been very few, and the working so good, that even in rainy weather Calcutta very often works direct with Agra; and when the lines of the Punjab and other circles are reconstructed in a similar manner and insulated, I see no reason why they should not work as well as the line Calcutta to Agra, and give a general result very different from that at present obtained.

9. I enclose a statement of the maxima and minima time intervals of messages received in the Agra Office from the offices at Calcutta and Bombay for the months of May, June, and July of the years 1863 and 1864, and some few of the same months of 1862, from which it will be seen that the maxima time intervals from Calcutta have decreased from an average of 36 hours 15½ minutes in 1863, to an average of 9 hours 6½ minutes in 1864; the minima time intervals from Calcutta have decreased from an average of 9 hours 4½ minutes in 1863, to an average of 34½ minutes in 1864; the maxima time intervals from Bombay have increased from an average of 27 hours 15½ minutes in 1863, to an average of 64 hours 8½ minutes in 1864; and the minima time intervals from Bombay have increased from an average of 3 hours 28½ minutes in 1863, to an average of 20 hours 38½ minutes in 1864, giving a general average from Calcutta of 22 hours 40 minutes in 1863, reduced to 4 hours 50½ minutes in 1864; while the Bombay general average of 15 hours 22 minutes for 1863 has been increased to 42 hours 23½ minutes in 1864.

10. The above is, I consider, proof of the great improvement in the general working of the line, Calcutta to Agra, in consequence of its being permanently constructed, and I expect a further reduction of the maxima and minima time intervals over this line, particularly the former, as soon as the insulation of those portions of it which are multiple or double is rendered less imperfect and defective than it now is; for at present, in consequence of the imperfect insulation, hardly a day passes without contacts taking place, when for the time being, the multiple and double lines can only be used as single lines, which, as a matter of course, are much cut in upon for the transmission of local messages, whereby the transmission of the through messages is somewhat retarded.

11. The cause of the very great increase of the time intervals of messages from Bombay to Agra is, I conclude, the present state of the lines of the Indore Circle, consequent on the unfortunately extensive use of rotten English top pieces for the new Hamilton standards lately erected.

12. I have stated that the inefficiency and insufficiency of the signalling establishment is the second cause of the not satisfactory working of the department.

13. For every instrument in a repeating office through which messages are passing night and day, 2½ signallers per instrument is not more than sufficient; where the work is higher, the rate may be reduced to two, one and a-half, or even one signaller per instrument, exclusive of the inspector or assistant in charge, and the deputy assistant, where the latter is allowed. Up to the present time I doubt if any of the circles of the eastern and western divisions have anything like the number required to provide signallers to their offices at the before-mentioned rates.

14. Of late, in the eastern division, the number of signallers has been on the increase; but as it has been almost entirely by probationers trained in the school at Barrackpore, and in the offices of the divisions, the increase to the efficiency of the establishment has not been in proportion to the increased number of hands, for, as a rule, the boys taken on as probationers cannot be considered as anything like efficient signallers till they have been at work in an office for one year.

15. During the years 1860 and 1861 in the western division, and for the last two years in the eastern division, the training schools for probationers have been more or less under my immediate orders, and I have been much surprised at the very grant want of education, even in its most simple forms, displayed by the greater number of the boys, and in some cases young men who have presented themselves as candidates for the vacancies in the Signalling Establishment. At first it was directed that candidates would not be entertained unless able to write a sentence of English from dictation in a good and legible hand with accuracy and correctness, and to solve questions in arithmetic, including the rule of simple proportion. In consequence of the very small number of boys who could pass the above examination, the number of vacancies to be filled up, and the urgent demand for signallers, the tests had to be reduced, till now the only one required is capability of writing a sentence of English with but moderate accuracy and in an indifferent hand, in reality

reality leaving the education of many of the boys to be commenced and finished by the Department; yet, as a rule, this appears to be the extent of education possessed by the class of boys who on this side of India present themselves as candidates for the existing vacancies, and from it the greater proportion of our signallers are obtained. It is true, in the course of a few months, with the instruction the boys receive in the school and offices, many of them pick up and improve wonderfully, and as the work in a Telegraph Office has in some respects a tendency to sharpen the wits and to bring out what may be in a boy, not a few become expert and good signallers; but by the time they are so, and of value to the Department, the period of two years for which they are at first bound to serve, has nearly expired; when, not having received any increase of pay, and the yearly increases to be expected under the rules of the Department within the next two years following, should they continue to serve, being but small, they seek and frequently obtain better paid employment elsewhere, and for it leave the Department, and the less intelligent and inefficient boys behind them in it. So that, after having been educated and paid by the Department for two years, but without having rendered any adequate service in return, many of those who are most likely to turn out good and efficient signallers leave it; the consequence is the present dearth, not so much of signallers as of efficient and experienced ones.

16. On the 1st July 1862, on the 1st March 1863, and on the 1st March 1864, general increases of pay were granted to the signallers all through the Department. The result of three such general increases of pay within two years would, it may be supposed, have raised the average rate of pay to the signallers at present in the Department; but taking the Bengal Circle as an instance, I find the contrary; for in 1862, 96 signallers drew Rs. 4,776 8. per mensem, being at the average of Rs. 49 11. 1. each; while in 1864, 108 signallers drew 4,345 rupees per mensem, being at the average rate of Rs. 40 3. 8. As under the existing rules as to the grant of increases of pay the higher paid signallers are generally and correctly considered the most experienced and efficient, it follows from the foregoing that the number of older and more experienced and efficient signallers has decreased, while the number of the younger and less experienced and efficient has increased.

17. In Madras the class of boys who present themselves as candidates for the situation of signallers is, as far as I have had an opportunity of judging and ascertaining, in all respects very much superior to those from which the supply of signallers is obtained in the Eastern and Western Divisions. As a rule, the boys are two or three years older, and are very much better educated; but then, in consequence of Madras being a much cheaper Presidency than either Bengal or Bombay, 30 rupees per mensem, a passed probationer's pay, is there worth considerably more than it is in either of the other two Presidencies. This is, I believe, one of the chief reasons why boys from Madras so often endeavour to get back to it.

18. The minimum age at which boys can be entertained as probationers is 12 years, and is, I consider, much too young. Under 14 years boys are in reality but children in all respects; without education as a rule, and, from their tender age, wholly unfit for and incapable of the performance of the duties required from signallers in offices where night work has to be performed, or when sent to temporary offices on the banks of rivers during the monsoon season. A young boy cannot keep awake; neither punishments inflicted, nor the dread of fines, have any effect in making him remain awake at night if left to himself. Many messages are, I have no doubt, lost through young signallers being placed on night watches and falling asleep at the instrument; for when called by a distant station to receive, being sleepy, indifferent, and not thoroughly roused, instead of receiving and writing down the message they simply give the understood signal after each word, at the end of the message, their names, and then, without having taken down one word of the message, resting their heads on the desk fall asleep again. For these reasons I am of opinion that no boy under 14 years of age should be entertained; and, if possible, that no signaller of less than one year's service should be placed alone on a night watch in an office where night work is the rule.

19. I am of opinion that it would tend considerably to the improvement of the signallers if they were always furnished with better accommodation than is now in many offices provided for them; such accommodation to include a separate room for them to take their meals in, and to remain in when not on duty. In many offices the signallers are too much crowded together. For persons of their age, who from the nature of their duties, are obliged to pass the greater portion of their time at work, necessitating their being constantly in doors and in attendance at the instruments, ample accommodation becomes necessary, and should be provided.

20. The Signalling Establishment requires to be increased, and the education of it raised to a higher standard before it can be thoroughly efficient for the correct and satisfactory working of the Department; but I see no chance of either of these ends being attained without some increase of expenditure.

21. The signallers who were taken on at the School at Ootacamund in 1859 and 1860
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were so on 50 rupees a month, and were bound to serve for five years. Some of the signallers taken on at Madras within the last two years were bound to serve for five years, their pay being 30 rupees a month from the day on which they passed as signallers, with an annual increase of 5 rupees per mensem up to the maximum of 50 rupees. The signallers entertained in the Eastern Division are so under deeds to serve for two years and three months, their pay being 30 rupees a month from the day on which they pass as signallers, but without any guaranteed increase of pay; and by your New Series Circular No. 29, a signaller of average character and ability is only entitled to an annual increase of 3 rupees a month, the first increase commencing after two years' service.

22. If boys of a better class and education will take employment in this Department on pay at 35 or 40 rupees a month from the date on which they pass as signallers, with the annual increase for average character, as laid down in your New Series Circular No. 29, commencing at the expiration of their first year's service, I think the experiment might be tried. The bonds to be for four years.

23. During the past working season, in consequence of many of the Assistant Superintendents having been employed on construction duties instead of inspecting and rectifying errors, &c., in the working of the offices, it has not been possible for them or the Superintendents to effect so strict a supervision of the offices as is considered necessary. This, however, will rectify itself as soon as the lines are reconstructed, when the necessity for Assistant Superintendents being employed on duties other than those of inspection and supervision will cease.

24. For most of the Circles of the Department, as at present arranged, a Superintendent and Assistant Superintendent appear to be quite sufficient for the effective supervision of the lines and offices, always provided the former are permanently constructed, and that there are no arrear accounts to be adjusted requiring from the Superintendent a large portion of the time which should be solely devoted to his more important and legitimate duties, namely, the management and supervision of his Circle.

25. The abolition of the grade of Director is not advisable, but I am of opinion that the appointment of Director, by being vested with enlarged and definite powers and responsibility, is susceptible of being rendered of very much greater use and benefit to the Department than as at present constituted.

26. A Director has power to entertain probationers, and to increase their salaries up to the maximum amount specified in their bonds or deeds, to dismiss signallers under three years' service, to inflict fines on signallers equal to one-fifth of their pay, to order and sanction changes within the Division, to grant privilege leave to Inspectors and others in grades below that of Inspectors, to sanction expenditure within the limit of 500 rupees for any one charge, and of 1,000 rupees for the entire Division for any one month, but only on working account. While, if a charge be but for one rupee on account of petty repairs to a line consequent on an interruption, the Directors' sanction is not considered sufficient authority: this is anomalous.

27. As the appointments of Director General, Directors of Divisions and Superintendents of Circles in the Telegraph Department are relatively similar to the appointments of Chief Engineers, Superintending Engineers, and Executive Engineers of the Department of Public Works, and of the Director General, Post Masters General and Post Masters in the Postal Department, it appears that it would be but consistent to confer on the Directors of Divisions of the Telegraph Department the same powers and authority as are vested in Superintending Engineers in the Public Works Department, and in Post Masters General in the Postal Department, within the limits of which all orders issued by Director to be considered as sufficient authority, but to be submitted to the Director General for his information through the medium of the Diaries as at present instituted, should it be considered expedient and necessary. A modification of this nature and to the above extent would, I am of opinion, much facilitate the working of the Department at large, and by relieving the head of it from the necessity of examining into and disposing of minute details, would afford him more time for the many matters of importance constantly calling for his consideration and disposal.

28. In the Eastern Division some alterations in the boundaries and reductions in the extent of the Circles would be advisable. The lines to Darjeeling and Assam should be formed into a separate Circle, as without them the Bengal Circle is as large as it ought to be, and cannot be reduced in any other direction without placing the main line, Calcutta to Agra, under the orders of two Superintendents; a measure the contrary of advisable. The Punjab Circle commencing at Futtighur and Agra to South-East, and extending to Peshawur, Dehra Ishmael Khan, and Rajunpore to the North-West, covers an immense extent of country, and has its extremities at so great a distance from its Head-quarters, whether they be stationed at Lahore or Umballah, as to be very difficult of management and supervision. It will, I consider, be advisable to reduce its extent, and to make Umballah the station at which it terminates; forming all the lines and offices to the South-East of that station into a separate Circle with its Head-quarters at Meerut. Both the Circles formed out of the present Punjab Circle to be 3rd Class Circles. If this

this cannot be effected then two Assistant Superintendents should be appointed, one for the Cis, the other for the Trans-Sutlej Divisions of the present Punjab Circle.

29. The salaries of the appointments of the Telegraph Department below that of Director General are much less than those of similar appointments, having a like amount of work and responsibility of the other Civil Departments of the Government Service. A comparison of the salaries of the Postal Department with those sanctioned for the Telegraph Department will show that the former are very much in excess of the latter, while the work, &c., of the appointments in the Telegraph are at least as great as those of the Post Office. When this is the case, the reason for the very great difference in emoluments is not easily understood.

30. At present the rates of pay of Superintendents are from 350 to 700 rupees a month. These, particularly the lesser rates, are too low; nor is there sufficient difference between the lowest rate of pay of a Superintendent and that of an Assistant Superintendent, the one being 350, the other 300 rupees a month. I think it would not be too much if the maximum and minimum rates of Superintendents' salaries were respectively increased from 700 and 350 to 900 and 500 rupees a month; Assistant Superintendents' salaries being increased to 400, 1st Inspector to 300, 2nd Inspector to 250, and 3rd Inspector to 200 rupees a month.

31. The revenue of the Department is increasing steadily, and may with safety be calculated to continue doing so. This of itself will provide for a certain portion of any additional expenditure on account of increased salaries, and more than the difference can at once be provided for without any additional expense to the State, by slightly raising the charges for the transmission of messages. An increase of 25 per cent. on the present charges would at once provide 2,25,000 rupees to meet increased salaries.

32. In India the cost of the materials, construction, maintenance, and working of a Telegraph is greater, I believe, than in almost any other country in the world; yet instead of the charges for the transmission of messages in India being greater in proportion to the cost of constructing and working the Telegraph, they are understood to be less than in Europe and America. This is reversing the custom which generally obtains in regulating other charges in India, which, as a rule, are at rates seldom less but often more than double those made in Europe.

33. Referring to the 9th paragraph of this letter, I also forward diagrams of the interruptions on the two sections of the main line, Calcutta to Agra, for the years 1862-63, and the first seven months of the year 1864; from which will be seen the very great reduction in the aggregate duration of the interruptions since the lines have been permanently constructed.

MAXIMA TIME Intervals of Messages from Calcutta to Agra.

Date.	MAY.			JUNE.			JULY.		
	1862.	1863.	1864.	1862.	1863.	1864.	1862.	1863.	1864.
1	-	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
2	-	11 22	13 01	-	12 20	13 55	34 30	-	5 38
3	-	16 21	32 35	-	9 10	25 38	37 45	-	6 48
4	-	7 19	9 22	-	14 04	15 06	-	57 30	1 10
5	-	6 58	19 25	-	25 09	3 20	-	43 20	-
6	-	7 56	6 15	-	43 54	6 30	-	74 00	2 41
7	-	36 09	1 25	-	31 14	5 21	96 00	-	11 26
8	-	14 38	7 04	-	37 53	8 41	45 45	74 55	8 14
9	-	26 50	5 30	-	28 49	12 37	11 45	100 02	11 47
10	-	45 20	0 55	-	51 20	8 14	-	52 32	19 39
11	-	15 49	0 56	-	38 41	7 19	-	44 49	2 29
12	-	8 22	7 12	-	57 11	10 17	-	63 47	1 08
13	-	3 37	17 28	-	58 10	11 13	68 00	42 40	5 17
14	-	11 34	31 19	-	26 20	5 24	-	22 40	7 18
15	-	25 27	47 39	-	47 38	5 56	-	-	8 56
16	-	22 22	17 45	-	11 07	6 51	-	-	8 14
17	-	4 54	8 40	-	28 20	8 10	-	49 30	4 52
18	-	19 28	8 43	-	33 51	5 07	-	-	3 05
19	-	30 32	14 36	-	33 10	4 52	128 00	97 09	2 38
20	-	42 10	12 09	-	-	6 35	72 00	-	2 29
21	-	10 20	10 25	-	-	1 58	78 46	131 25	7 56
22	-	9 48	12 05	-	26 55	11 20	82 00	-	6 58
23	-	41 16	7 33	-	86 45	10 43	47 30	90 08	25 55
24	-	10 00	0 59	-	31 55	6 21	50 30	46 49	14 05
25	-	4 20	4 58	-	39 26	7 36	-	52 35	8 28
26	-	51 43	1 51	11 49	34 42	3 38	79 00	35 47	0 29
27	-	8 00	2 23	18 51	79 43	12 12	96 00	21 16	11 20
28	-	6 38	7 20	-	67 17	14 30	126 00	42 50	12 48
29	-	2 20	4 09	36 13	11 55	2 55	129 00	40 45	2 20
30	-	7 30	11 26	25 30	5 35	12 12	-	28 00	3 47
31	-	28 36	14 12	11 30	17 20	11 40	168 00	38 45	12 29
	-	7 55	7 12	-	-	-	158 00	33 00	15 43
TOTAL	-	545 34	345 52	103 53	989 54	256 11	1,508 31	1,284 14	228 7
Number of Days -	31	31	5	28	30	18	23	30	
General Average -	17 36	11 11	20 47	35 21	8 32	83 48	55 50	7 36	

1863.	
H. M.	
May - - -	17 36
June - - -	35 21
July - - -	55 50
	108 47
Average for the Three Months	36 15

MINIMA TIME Intervals of Messages from Calcutta to Agra.

Date.	MAY.			JUNE.			JULY.		
	1862.	1863.	1864.	1862.	1863.	1864.	1862.	1863.	1864.
1	-	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
2	-	0 03	0 01	-	0 12	0 01	18 00	-	0 15
3	-	0 03	13 12	-	1 15	0 47	29 00	-	0 16
4	-	0 03	0 14	-	0 38	0 22	-	32 40	0 05
5	-	0 03	0 15	-	9 50	0 02	-	31 20	-
6	-	0 26	0 01	-	0 26	0 09	-	38 52	0 01
7	-	5 34	0 02	-	1 36	0 12	7 00	28 52	0 01
8	-	0 25	0 03	-	6 36	0 14	10 20	40 14	0 01
9	-	7 40	0 01	-	2 46	0 16	2 45	20 40	0 06
10	-	7 32	0 14	-	1 35	0 14	-	19 05	0 21
11	-	3 36	0 13	-	16 12	0 12	-	17 15	0 12
12	-	2 08	0 01	-	1 55	0 01	-	0 55	0 44
13	-	0 17	0 44	-	2 37	0 06	11 30	8 00	0 05
14	-	0 03	0 52	-	16 17	0 34	-	8 08	0 13
15	-	0 43	0 19	-	1 27	0 18	-	-	0 20
16	-	0 52	2 37	-	4 33	0 01	-	-	0 01
17	-	0 27	0 01	-	3 15	0 43	-	-	0 26
18	-	3 42	0 01	-	-	0 09	-	-	0 01
19	-	0 05	0 07	-	0 18	0 14	20 00	70 04	2 20
20	-	1 01	0 08	-	-	0 10	1 22	-	0 01
21	-	0 05	1 30	-	-	1 00	21 00	24 36	0 06
22	-	0 08	0 05	-	8 15	0 16	20 00	-	0 36
23	-	0 05	0 12	-	16 43	0 03	4 00	27 04	0 25
24	-	0 25	0 08	-	11 55	0 12	0 30	12 05	0 27
25	-	1 28	0 10	-	2 05	0 05	0 30	0 08	0 16
26	-	2 12	0 20	-	3 34	0 05	2 00	0 43	0 29
27	-	1 10	0 20	38 39	1 22	1 30	3 30	7 48	0 27
28	-	0 56	0 01	-	6 32	0 06	0 42	18 55	0 28
29	-	0 17	0 19	2 03	1 00	0 09	0 42	19 45	0 09
30	-	0 13	1 00	0 50	0 45	-	-	20 15	0 05
31	-	0 56	9 36	0 45	9 00	0 20	47 00	17 07	1 14
	-	0 54	1 01	-	-	-	1 15	16 53	-
TOTAL	-	43 32	33 48	42 17	132 39	8 31	201 06	481 24	10 11
Number of Days -	31	31	4	27	29	19	23	29	
General Average -	1 24	1 5	10 34	4 54	0 17	10 35	20 56	0 21	

1863.	
H. M.	
May - - -	1 24
June - - -	4 54
July - - -	20 56
	27 14
Average for the Three Months	9

MAXIMA TIME Intervals of Messages from *Bombay to Agra.*

MAY.			JUNE.			JULY.			
1862.	1863.	1864.	1862.	1863.	1864.	1862.	1863.	1864.	
M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	
-	4 5	25 43	-	2 35	15 02	-	-	195 40	
-	2 5	33 56	-	5 54	21 08	-	-	172 41	
-	5 15	49 13	-	7 00	54 11	-	9 00	176 11	
-	10 45	50 44	-	6 42	56 05	-	97 49	133 53	
-	8 26	35 25	-	6 02	54 52	-	74 37	7 33	
-	5 19	11 10	-	31 23	18 47	-	-	27 29	
-	15 17	8 52	-	38 20	4 42	-	39 41	14 08	
-	7 45	9 55	-	-	26 20	-	19 03	10 45	
-	5 20	10 31	-	-	-	-	9 10	17 57	
-	5 3	2 55	-	23 10	-	-	30 02	35 28	
-	2 13	38 32	-	83 15	79 53	-	28 13	-	
-	3 20	9 25	-	63 45	80 15	-	42 44	-	
-	8 45	13 9	-	57 34	52 15	-	2 23	82 39	
-	12 40	36 30	-	25 26	94 23	-	12 14	104 04	
-	4 11	40 4	-	-	95 05	-	21 51	75 59	
-	4 20	33 35	-	68 27	48 21	-	29 50	70 59	May - - - 7 27 20 59
-	6 48	9 25	-	-	41 37	-	-	-	
-	8 30	9 3	-	-	82 20	-	9 59	109 14	June - - - 49 54 66 17
-	3 15	12 2	-	-	66 48	-	-	-	
-	3 20	6 54	-	79 40	48 14	-	31 45	118 59	July - - - 24 25 105 10
-	3 9	5 35	-	56 30	-	-	-	143 46	
-	3 45	16 15	-	104 55	-	-	3 57	-	
-	12 10	16 59	-	101 05	-	-	7 28	148 13	
-	14 46	10 38	-	106 50	-	-	14 25	113 08	
-	14 42	27 48	-	113 58	146 34	-	30 20	100 20	
-	8 55	7 12	-	63 56	100 03	-	29 47	-	
-	14 58	17 56	-	69 01	-	-	12 30	92 54	
-	12 38	16 10	-	28 13	-	-	9 30	147 43	
-	4 6	22 54	-	18 18	139 16	-	10 36	151 35	
-	6 13	31 17	-	52 53	132 08	-	10 05	178 47	
-	9 17	30 41	-	-	-	-	23 39	199 32	
TOTAL - -	231 21	650 28	-	1,197 52	1,459 19	-	610 38	2,629 27	
of Days -	31	31	-	24	22	-	25	25	
Average -	7 27	20 59	-	49 54	66 17	-	24 25	105 10	

	1863.	1864.
H. M.	H. M.	
May - - -	7 27	20 59
June - - -	49 54	66 17
July - - -	24 25	105 10
Average for the Three Months }	81 46	192 26
	27 15½	64 8½

MINIMA TIME Intervals of Messages from *Bombay to Agra.*

MAY.			JUNE.			JULY.			
1862.	1863.	1864.	1862.	1863.	1864.	1862.	1863.	1864.	
H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	
-	0 40	1 09	-	0 42	7 7	-	-	133 32	
-	0 35	2 12	-	0 35	0 47	-	-	2 42	
-	0 42	1 01	-	0 22	34 59	-	-	1 12	
-	0 55	0 51	-	0 52	1 36	-	25 12	0 43	
-	0 55	0 43	-	0 46	0 52	-	1 35	0 57	
-	0 42	0 49	-	9 23	2 25	-	1 34	1 48	
-	1 02	0 40	-	3 15	1 03	-	7 10	1 35	
-	0 08	0 40	-	-	1 35	-	2 52	0 20	
-	0 24	2 15	-	-	-	-	3 00	1 21	
-	1 00	0 50	-	22 14	-	-	2 32	22 46	
-	0 45	5 46	-	6 49	4 21	-	1 30	-	
-	0 43	1 00	-	4 00	19 46	-	0 50	-	
-	0 30	0 50	-	1 00	1 20	-	0 40	24 21	
-	0 31	4 30	-	0 44	1 44	-	2 10	2 10	
-	0 25	0 53	-	-	49 07	-	0 52	1 27	
-	0 42	3 14	-	17 40	18 25	-	0 42	1 00	
-	0 10	0 45	-	-	9 00	-	-	-	
-	8 30	0 41	-	-	5 29	-	1 05	49 17	
-	1 00	0 35	-	-	4 55	-	2 02	-	
-	0 06	0 45	-	3 01	29 08	-	8 46	50 56	
-	1 00	1 21	-	19 52	-	-	0 36	53 24	
-	1 38	0 38	-	15 10	-	-	0 35	-	
-	1 04	1 15	-	3 01	-	-	2 33	91 10	
-	1 29	0 39	-	5 42	-	-	1 38	70 10	
-	1 00	6 11	-	1 42	93 33	-	1 20	76 55	
-	0 36	0 47	-	21 07	71 36	-	-	-	
-	1 00	1 25	-	0 56	-	-	-	-	
-	0 40	0 55	-	0 05	-	-	1 29	47 18	
-	0 03	1 15	-	12 03	100 52	-	2 58	32 14	
-	0 30	31 01	-	1 40	111 23	-	1 30	65 02	
-	0 46	0 50	-	-	-	-	3 05	-	
TOTAL - -	30 11	76 26	-	152 41	571 3	-	78 16	772 20	
of Days -	31	31	-	24	22	-	25	23	
Average -	0 58	2 28	-	6 21	25 57	-	3 7	33 30	

	1863.	1864.
H. M.	H. M.	
May - - -	8 58	2 28
June - - -	6 21	25 57
July - - -	3 7	33 30
Average for the Three Months }	10 26	61 55
	3 28½	20 38½

App. No. 2.

From *C. Galbraith*, Esq., Officiating Director of Telegraphs, Western Division, to Lieutenant Colonel *C. Douglas*, Director General of Telegraphs in India (No. 756); dated Bombay, 20 August 1864.

Mr. Bayley's letter, No. 1344, of 13th July last.

2. It is asked, would not a closer supervision of the working of the department by the Director General be likely to result in improved practice?

3. I hardly think it possible that one man could keep up a close supervision on the chances and changes incident to 12,000 miles of line, and something like 350 instruments; unless—

1st. He were placed at a central point.

2nd. He had a special wire for supervisory purposes.

3rd. That he devoted himself to that branch of the business.

4. As these conditions were impracticable, three directors were appointed.

5. Their duties were never clearly laid down; but, for my part, I assumed the office with the deep conviction that my business would be to keep up a "close supervision" over the telegraph work, as distinguished from clerical work, useful and even necessary, yet not the business of the department.

6. If close supervision could have been effective, there would have been little to find fault with in this division; but to make that supervision effective, it was required:

That the director should in this division be a director general; that superintendents should regard him as such, and in business generally look no further than to him, and be, as it were, unconscious of any one beyond him; that he should be as unquestionably the superior of the superintendent, as the superintendent of the inspector.

7. If this cannot be ventured upon, then I do not hesitate to say, abolish the office.

8. If it be said that the director already has the rank and position here claimed for him, that no other director complains, and that the fault must be in myself, I reply, it may be so, and that in such case my preference some time ago avowed for a superintendentship, should, in the interests of the department, be gratified. But it may, on the other hand, be, that other directors have had to deal with more business-like men, or it may be that they have not participated in my monomania, as they might style it, for vigorous, prompt supervision of telegraph work, current supervision as distinguished from retrospective, and that, taking things more easy, they have excited less opposition.

9. My portraiture of what a director is, as regarded from a superintendent's point of view, I have not now for the first time to draw, my No. 1662 of 12th November 1863 might almost be substituted for that which I am now writing.

10. A close supervision then is, in my opinion, the one thing needful; current supervision I mean as distinguished from retrospective; and provided the directors are worthy the high position I desire to see them enjoy, their supervision cannot, I think, fail to be more effectual than that of any one man can possibly be; the difficulty is in finding men to keep it up. The qualities required are not common; if they were, there would be little need for directors or director general as superintendents would themselves suffice. But I repeat, one circumstance is essential to a director's efficiency, namely, that he shall feel himself and be acknowledged to be a real potentate in the department. It might be advisable even to choose directors from a higher class of men, as for instance from the covenanted service.

11. Should the circles be smaller?

12. This, as everything else, is a question of men, not systems and arrangements. One man will drop dead in harness, rather than the departmental carriage shall stand still, while another will be satisfied with reporting that it has stopped, and when some one else has set it going again, he will report that also, and call attention with pride to the regularity of his reports and returns generally, as if the telegraph department had been instituted to record events, and not to rule and control them. I think, however, that, for average men, some circles are too large.

13. There are, however, other obstacles besides size of circles to a superintendent's giving the proper quantity of time and brains to his business. I proceed to name some, and to add a few remarks bearing on the subject.

14. The arrear accounts are a log about a man's heels, exhausting all his energies in the single task of carrying it, and leaving none for his proper work; shrewd men insist on being allowed to commence fresh books; more simple men involve themselves in the inexplicable muddle bequeathed them by one, two, three or four predecessors, and never free themselves from their thralldom.

15. I have in another place thrown out the suggestion that a special central officer might be employed to advantage in these accounts. I go further, and say that he might judiciously be employed in doing a good deal now done in the superintendent's office, leaving to the superintendent a small compact establishment for keeping his proper accounts, namely, that of work done and how done. It is quite lamentable to see these large establishments of clerks with the superintendent at their head, everlastingly plunged in mercantile accounts and assiduously employed in multiplying papers, which are but records of past events.

16. The store department might be made more prompt and foreseeing, always having stores in readiness to meet or rather to forestal demands, and supplying with speed and promptitude what is called for.

17. There is a want of synchronism in the movements of the different branches of the department. Thus it often, nay generally, happens that a new set of returns is ordered and ruled

ruled forms are promised, but they don't come; or, if they come, then only when forms have been printed in every circle, or else much time spent in ruling. An order was issued that sulphur should be chipped out of insulators and tools were promised, but they never came. (I don't say they were required.) I, however, have little doubt that unless you countermand them they will be received six or twelve months hence, when their intention will almost have been forgotten.

18. Line work should be begun at the beginning of the working season, and not at the end. I kept this well in view last rains, yet never was an intention more signally foiled. Who can tell how much the sad working of these rains has been owing to their having caught us in the very midst, I might almost say in the very beginning of our work, instead of finding us with every thing made right and tight. When at last permission was given for the Ajmere stores to be despatched and Mr. Tolhunter to start for Deesa; when the first batch of top poles which enabled us fairly to commence line work was received, the time had come when line men ought to have been contracting their operations and congratulating themselves on being ready for the monsoon.

19. The department should be secured against having had stores foisted on it. It is untellable the mischief the English top poles have caused.

20. There should be a fairer allotment of officers to circles. In Sindh, at this moment, the superintendent dares not leave his desk, yet his line demands his presence, there being no assistant superintendent, all the rest is a little indignant protest, which I wished you to see. That Mr. James Lane should wish his brother moved to Bengal is natural; but having, I presume, got your sanction, I am inclined to think that over the next tiffin some such remark as this was made, "Well, I've got Jack transferred; won't Galbraith be done? I shan't tell him; let him find it out."

21. New and untried stores like the Brooke insulators should not be introduced for general use till tested in some one or other locality.

22. Again, a more prompt, a more, so to speak, vivacious style of doing business is, I am sure, practicable, and is required, in all ranks. I have had occasion lately more than once, to notice the sluggishness of various parties. Men don't disobey, but they obey when and how they choose. Here again I prescribe my panacea,—authority and power for the directors. Had I been in the position I recommend a director to have, certainly, to give an instance, the childish trifling in the question of Yussouf Ally and the new Bulsar Line, which has now run through three or four diaries, should have been nipped in the bud.

23. Superintendents must be made to understand that what they have to superintend is the telegraph and not the three, four, or ten clerks in their office.

24. Again, I would urge on you the necessity for a thorough substantializing of the line and re-furnishing of the offices. We have never had fair play, but have been labouring under the disadvantages resulting from what was once the glory of the department, namely, the wonderful rapidity with which this country was traversed by telegraph line. We are, in fact, engaged in making permanent the lines that were temporarily run up. Our critics should take this into consideration, and remember, too, that it was they who most urged that every thing should be sacrificed to rapidity. We have never yet had a thoroughly good line to work upon. Could not every one, from the highest to the lowest, be made to strain every muscle in the coming working season, with a view to have for the first time a permanent endurable line? Then in offices what reinforcements and renewals are required; In the great and important office here, where work has lately been execrable, much may have been owing to defective instruments, yet there is not a spare one to substitute. From other offices, too, I hear of worn out instruments. I fear little pains are taken to preserve them by cleaning and care, and superintendents and assistant superintendents, on their inspection tours, do not, I have an idea, concern themselves enough with such details as instruments, connections, and earth lines.

25. I have, on another occasion, expressed myself strongly in favour of settling the pay of signallers on a more liberal scale; and I would offer more inducements to natives, disposed as I am to look to them in a greater measure than hitherto for recruits. To use a hackneyed but intelligible term, genteel native lads cannot be got for the low pay we offer; those we do obtain are too often as lads from a corresponding class of Europeans would be—uncultivated, unenlightened, uninformed. But there is a large number of natives who might be induced to look to this department as their profession, and who, I am half ashamed to say, have a far better knowledge of English, and more acquaintance with geography, grammar, history, and so forth, than the great bulk of the European or Eurasian lads who at present join the department.

(Confidential.)

From J. T. Blissett, Esq., Director of Telegraphs, Southern Division, to Lieutenant Colonel C. Douglas, R. A., Director General of Telegraphs in India (No. 781); dated Bangalore, 9 September 1864.

I HAVE the honour to acknowledge receipt of your Confidential (No. 982); of the 27th July 1864, together with copy of letter No. 1344, dated 13th July 1864, from the Secretary to the Government of India, to your address, and with reference to the subject thereof, beg to remark as follows—

2. That the present constitution of the Department into divisions of large extent, under divisional directors, having subservient to them superintendents in charge of circles com-

App. No. 2.

prising these divisions, is, viewing the great extent thereof, considered the most comprehensive, expedient, and judicious that could be adopted for the effective carrying out of its administration in all minutiae and detail; and no alteration in the existing arrangements at present suggests itself, whereby the same is likely to be improved, so far as the respective classification of the higher grades in the Department are concerned, as to division of authority.

3. I beg, however, to recommend what appears to me as exceedingly advisable, viz., the establishment of a separate Complaint Office at the head-quarters of each division, with an adequate staff to carry on the duties that would appertain thereto, and I submit this recommendation on the many representations that have been made to me from time to time by various members of the mercantile community, and the public generally. I also beg to suggest that each Director be permitted to supply stores, locally obtainable, to the respective circles of his division; that the general supply of forms, &c., common to the Department, still continue to be supplied, as heretofore, from Calcutta, but in sufficiently large quantities, to enable Directors to maintain to their respective circles a complete and adequate supply thereof. All stores obtainable from Europe to be issued, as at present, from Calcutta. I furthermore beg to suggest that Directors be vested with enlarged powers, and granted authority to sanction the execution of all works of an emergent nature within stated limits, but of greater extent than those now permitted.

4. I beg further to state as my opinion, that the efficiency of the Department would be augmented by an increase to the subordinate line Establishment; as that, at present sanctioned, is not deemed sufficient. Periodical supervision by superintendents and assistant superintendents, in addition to the prevailing maintenance of same, by inspectors and others, in immediate charge of sections, would, it is considered, with a moderate addition to the present line Establishment, be amply sufficient to secure their effective working, where speedy sanction could be awarded in cases when recommendations are duly supported by reliable testimony, to all repairs, renovations, and alterations of lines; subjected to the above course of minute inspection and scrutiny, it is confidently believed, that a closer and more able supervision of the lines and a more effectual maintenance of same would result were the above carried into effect.

5. I would also suggest that every inspector be provided with a portable battery and testing instrument, and that one and all be made to learn signalling, as a condition of their retention of present appointment; it is considered essential that an inspector should at any time be in a position to correspond with offices on either side of him while travelling on his line.

6. It is likewise believed the efficiency of the Department would be increased by the better pay of signallers, more rapid promotion, and a known gradation of same within prescribed periods, so that, on entering the Department on the salary at present laid down, they would be able to look forward to a certain stipulated increase of salary, after stated periods of service, provided in all cases their conduct warranted same; this would, moreover, prove a most effectual check on the behaviour of signallers, if it was made known that promotion would entirely depend on their individual good conduct, and that the same would be withheld for certain periods where any cases of misconduct or dereliction of duty had occurred. In these cases the defaulter books would be of manifest benefit in regulating promotion, where the punishment, instead of, as at present, being inflicted by the levying of a direct fine or extra duty, be resolved into forfeiture of promotion for three, six, or more months.

7. It is not apparent in what direction the increased expenditure that would be necessary in carrying out the above suggestions could be met; and it is believed that reductions in the present Establishment to this end would be found detrimental. In disposing of this matter, I would respectfully beg to urge that the Government be solicited to take into consideration the increasing extent and importance of the Department, and the augmentation of expenditure manifestly and necessarily attendant thereon.

From *B. C. Bailey, Esq.*, Superintendent of Telegraphs, East Coast Circle, to Colonel *C. Douglas*, Director General of Telegraphs in India (No. 173); dated Vizagapatam, 26 September 1864.

WITH reference to your confidential memorandum (No. 1615), dated the 15th instant, forwarding for my opinion copy of the Home Secretary's letter No. 1344, dated 13 July last, I beg to offer the following remarks:

Causes of bad work.

2. I attribute the bad working of the Telegraph Department to six causes, viz.—

1st. *The bad state of the Lines.*—There is not, I believe, one division of the line in India that is in perfect order throughout. The greater portion of each division is generally good; but there are a number of bad pieces, and these have the same effect as rotten links in a chain. Communication is kept up pretty well so long as the weather is fair; but every heavy shower of rain, or a gale of wind, causes either a total interruption or imperfect communication.

2d. *Unfitness of the Assistants in charge of Signal Offices.*—Many of the assistants are badly educated and of low habits, and are unable to command either respect or obedience from those placed under them. With these persons the signallers do just as they like, and

and, unless the assistant is able and willing to do the greater part of the work himself, the messages are delayed at the instruments till it suits a signaller's convenience to attend to them.

3rd. *Paucity of Signallers making it necessary to give one man (or boy) the work that should properly be done by two people, and preventing the dismissal of bad characters.*—Nearly all the signal offices are short-handed, and the same signallers have frequently to work night and day, getting a little sleep now and then when there are no messages passing, and sometimes stopping the work intentionally to take rest. Signallers, of known bad character, are kept on simply because there are no spare signallers to put in their places.

B. The want of signallers is owing, first, to the practice of sending new signallers (generally mere children) away from their homes before they are able to take care of themselves, and, secondly, to the tardiness and uncertainty of promotion. Boys are admitted as probationers at 13 and 14 years of age, and immediately they pass in reading signals are posted to offices hundreds of miles from the station in which they were originally engaged. The assistants in charge do not trouble themselves about their signallers beyond seeing that they take their turns of duty, and at other times the boys may be running about the barracks and bazaars getting into debt and worse. When quarters are provided on the office premises the boys are at the mercy of any kitmutgar or cook who will undertake to mess them, and when there are no quarters of the boys, go to any person who will board and lodge them for 15 or 20 rupees per month. Of course only very poor people will allow their children to enter a department having such drawbacks, and consequently we get only about half the number of hands we require, and those of the lowest class.

C. The tardiness and uncertainty of promotion cause signallers to leave the department just as they have become perfect in their duties. Our signallers may be found in every new department of Government, and in the Railway Telegraph and the Irrigation Company, in all of which the salaries are higher and the work lighter than in this department.

4th. *Inefficiency of the Signal Office Establishment.*—Besides paucity of signallers there is the want of a proper establishment, peons, &c. Our peons are paid only at the ordinary rates, yet they have to work night and day and Sundays carrying messages, preparing batteries and lamps, and watching the instruments when the signallers are asleep. This is so very different from the work of other government offices that we get the worst class of men, and they remain with us only till they find employment elsewhere.

5th. *Delay in carrying on the work of the Department caused by Superintendents of Circles having to refer to or through the Director of the Division.*—Scarcely anything can be done by a superintendent without first referring to the director, though all the cases for which that officer's authority is required could be disposed of by the superintendent without the slightest risk or expense to the department, and with equal satisfaction to the parties concerned. When it is necessary to obtain orders from the head of the department, cases requiring immediate action are often delayed for two months. Besides the delay of referring matters to the Director, there is the great inconvenience caused by that officer's order being sometimes cancelled by the Director General (when the diary of proceedings is submitted for his approval) long after it (the order) has been carried out.

6th. *The little authority allowed to Superintendents in making repairs to the Lines.*—A superintendent's authority is not sufficient to pass the smallest expenditure on account of line repairs, and if he ventures to give an order it is at the risk of sanction being refused. For every little item, however small, an estimate has to be prepared and submitted to the Director General for sanction before the work can be commenced, though the line may be tumbling down for want of repairs that would not cost more than 20 rupees. Certainly many little repairs are made by zealous inspectors in anticipation of sanction; but they have to send in estimates for the work, and to keep back the bills till letters of credit have been issued by the Auditor General at Calcutta. Other line officers, who are not disposed to run any risk, will allow the lines to fall to pieces rather than do any work till the formal sanction has been received. The same course of estimates and bills has to be followed in the case of petty repairs made by a line rider during interruption to communication. The inspector pays expense from the contingent money in his hands; but estimates have to be submitted the same as for other work.

3. In the above remarks I have pointed out what I consider to be the defects of the department. I will now suggest such measures as appear to me necessary to put the lines and offices in efficient working order, and to ensure good telegraphic communication in all weather.

Suggestion for putting the lines and offices in good order.

1st. *The Lines.*—I would suggest that the bad pieces of line be put in perfect order at once and at any cost. To effect this it will be necessary, first, to make a permanent crossing at every river, and, secondly, to replace the rotten posts. Insulation may well be left to the last, as communication can always be maintained as long as the wire is held off the ground on good posts, and well secured at the rivers. Indeed, insulation might be dispensed with altogether till some better description of insulators can be found than those now in use in India.

2nd. *Assistants in charge of Signal Offices.*—Our signallers are not of the class likely to qualify for assistants; I would, therefore, suggest that young men, of fair education and

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business habits, be employed and trained specially for the charge of offices. It is not necessary to bring men from England for this purpose, as there are qualified persons at most of the large stations in India who would doubtless enter the department if a sufficient inducement was held out to them.

3rd. *Signallers*.—A. I would suggest an increase to the number of signallers so as to allow the heavily worked offices to act as deputy assistants, two for each instrument, and extra to provide for leave of absence, sickness, &c. For the other offices I would allow two signallers to each instrument, I would also have a few probationers at the head office of each circle to fill up vacancies made by dismissals, resignations, &c. In no department in India is rest so necessary as in the telegraph department, yet, owing to the paucity of hands, leaves can very seldom be granted except on medical certificate.

B. All that appears to be necessary to get a sufficient number of signallers, is to make some arrangement to ensure the boys being properly taken care of till they are able to look after themselves, and to guarantee a regular increase of salary once a year, according to the scale given in your Circular No. 29, New Series. This circular was issued to the department nearly two years ago, but its terms do not appear to have been fairly carried out. The practice in making promotions appears to have been to class under the heads "indifferent" and "bad" signallers who, considering their youth and experience, might be fairly described as "good" and "average."

4th. *Peons, &c.*—I would allow one night peon to every repeating office, and one bearer or lascar (to clean batteries, lamps, &c.) on four or five rupees per month, to every office in India. In repeating offices one peon is required constantly in the signal room to pass messages from one signaller to another, and to the assistant in charge when he is in his room.

5th. *Correspondence of Superintendents*.—In a department that requires such close attention and such prompt action as does the telegraph, it is an object of the greatest importance for the executive officer to be able to receive and issue instructions at the shortest possible notice; and I think, therefore, that it would be an advantage in every respect to allow superintendents to refer to the head of the department direct, and to dispose of such cases as may be safely entrusted to them. This plan would, of course, throw more work on the head office, but I submit that it would be better for the department to increase the director general's office establishment than to continue the present arrangement.

6th. *Superintendent's authority regarding Line Repairs*.—The lines must be kept in efficient working order, and it would save an immense deal of trouble to allow superintendents to order petty repairs to the amount of 30 or 40 rupees per month for each section, and to have the bills audited by the civil paymasters. All works coming under the head of construction, re-construction, and extensive repairs, might be estimated for and passed as usual. Petty repairs necessary to restore communication, or to prevent the falling of posts, are as much "ordinary contingencies" as oil for an office, and the charges for such should, I think, be passed without further authority than the superintendent's countersignature.

Cost of working
the Department
efficiently.

4. As regards the cost of working the department, I am of opinion that the scale of establishment at present allowed for the lower grades is not sufficient, and that it will be necessary to make some increase to put the department on an efficient footing. Any reduction that might be made in abolishing the director's office would, probably, be compensated by increasing the establishment of the director general's office and promoting the junior superintendents, leaving any increase in the signal office establishments to be provided for in such manner as might be considered advisable.

Increase of charges
for messages.

5. The simplest way to meet the enhanced expenditure would be to increase the charges for messages. By far the greater number of messages sent along the Indian line are on commercial matters, and the sender of these think less of the expense than of the certainty of their messages reaching their destination correctly and in a reasonable time. I believe that an increase of 50 per cent. on the present charges would not be objected to by the merchants if it was only made evident to them that a corresponding improvement had been made in the arrangement for transmitting their messages.

MEMORANDUM submitted in accordance with the Director General, No. 1614, of the 15th September 1864.

HAVING been desired by the Director General to record with the utmost freedom of discussion my opinion on the subject of the reference from the Government of India in the Home Department, No. 1344, of the 13th July last, I beg to submit the following Memorandum, which I have divided into four heads, viz:—

I. Revenue.	III. Rules.
II. Salaries.	IV. Lines.

I.—Revenue.

Although opposed to the prevailing opinion regarding postal and telegraph revenue, my belief is that an increase in our charges would add to the income of the department. The great bulk of messages are sent over our longest lines, and for this reason, taking into consideration the fact that those lines, (already crowded, so to speak) could not carry off sufficient

sufficient additional work to make up for the decreased rates, I believe that the extension of the system of an uniform charge throughout India could not but result in a falling off in our collections.

On the other hand, there is every reason to believe that there would be no diminution either in the length or number of messages were the charges increased, as no one uses the telegraph, even at one rupee, when the post at half an anna would answer the same purpose.

The cost of material in India being greater and "educated" labour dearer than in England, France, and America, less than half the average rates current in those countries are in force in this department. It cannot, I submit, be denied that this is an anomaly.

The tariff given below would, I think, be found to answer well. It is scarcely necessary to alter the mode of counting words charged or peon hire. The existing "rate" of 400 miles should also be retained.

Tariff.

10 words and under, per rate	-	-	-	-	-	1 rupee.
Above 10 words, per word per rate	-	-	-	-	-	1½ annas.

It will be seen that by the above arrangement, the class of short messages usually sent by private individuals will not be materially interfered with, excepting that six words less can be sent for the rupee. The increase would thus be borne chiefly by opium speculators and mercantile houses, who derive pecuniary benefit from their use of the telegraph, and whose messages by the Mediterranean route show that they care little for the expense incurred.

II.—Salaries.

It is, I think, generally admitted that superintendents, more especially the lower grades are underpaid, and it would, I consider, be no more than fair to assimilate their salaries to those of the Public Works Department; a superintendent ranking with the executive engineer of his class, viz.:—

							Rs.
1st Class	-	-	-	-	-	-	900 per mensem.
2d "	-	-	-	-	-	-	750 "
3d "	-	-	-	-	-	-	600 "
4th "	-	-	-	-	-	-	500 "

The travelling allowance should also, I submit, be made equal to that granted to officers of the Public Works Department.

Assistant superintendents should, I think, draw 350 rupees per mensem, which is the salary of an assistant engineer in the Public Works Department. I attach considerable importance to the difference between the pay of an assistant superintendent and that of a superintendent being such as to make the promotion felt. There is now only a rise of 50 rupees, which the loss of travelling allowance more than counterbalances.

I would propose no alteration in the pay of inspectors, but in lieu would give every officer of that grade who may be in charge of a line a mileage allowance of two annas per mile per mensem, calculated on the extent of his charge; the allowance to be drawn only when all his lines are working well.

The pay of overseers I would apportion as follows:—

							European.	Native.
1st Overseer	-	-	-	-	-	-	120	80
2d "	-	-	-	-	-	-	100	65
3d "	-	-	-	-	-	-	80	50
1st Assistant Overseer	-	-	-	-	-	-	60	40
2d "	-	-	-	-	-	-	50	32
3d "	-	-	-	-	-	-	40	25

Office Assistants.—This is a grade which, from its being identical as regards pay with that of signaller, is not sought after by the latter class as it should be. The office allowance is not a sufficient remuneration for the responsibilities entailed by the charge of an office, and the anomaly is the more apparent in cases where a steady signaller, raised to office charge, has one or more signallers under him drawing more pay proper than he does himself; instances of this are by no means uncommon. Moreover, the equality of pay between the head of an office and his subordinates not only lessens his authority over them, but also tends to prevent the assistant, when promoted to charge of the office, withdrawing himself from his former associates; and I have noticed that, as a general rule, offices in which the assistant associates and messes with his signallers are not by any means so well regulated as those in which the head of the office maintained his proper position.

Signallers.—The difficulty in obtaining recruits in this branch, and the deterioration in the class of candidates, induce me to think that the pay on entering should be raised to 30 rupees, and that 40 rupees should be given to a signaller on his being posted to an office. I do not think any object is gained by increasing a signaller's pay by five rupees. The rise is scarcely felt, and I feel convinced that a greater increase at longer intervals would be more acceptable to them as a body.

The chief point requiring notice, as regards this grade, is the short average duration of service, which, if estimated at four years, would, I believe, be rather above than below the mark. It is not difficult to ascertain the cause of this. The department engages boys of 14 whose penmanship is indifferent, and to whom few if any other kinds of employment are

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open. In a short time, say three years, they, as a rule, write a good hand, and are, from the nature of the work, sharper and more intelligent than when first engaged; at this period, or even earlier, they begin to look out for other employment. The department is, in fact, a kind of finishing school for lads whose parents cannot or will not maintain them longer. If the period of their indentures be increased to five years, the supply of recruits, already poor both in quality and quantity, will fall off still more.

It may be considered that one signaller who has served two years is worth two who have just been posted to offices after leaving the training school, and for each year's service up to five he improves considerably. After five years, I do not think his efficiency as a signaller is progressive, but by that time, if ordinarily intelligent and well-conducted, he may be expected to be either a deputy assistant or in charge of an office, either of which carries a small allowance; I would for this reason offer more inducement to the signallers who have served two years and upwards to remain, and suggest the following scale* of pay as likely to answer the purpose. The scale is more particularly intended for signallers and deputy assistants. The promotion of assistants should, I think, be considered according to their qualifications for office charge.

* *Vide* annexure.

III. Rules.

I believe that a comprehensive code of departmental rules, classified and indexed, would relieve the superintendents of a very large proportion of their correspondence, and set them free to give more time to the supervision of their lines and offices. Many of the superintendents are now so tied down to their desks as to leave the working of the circle in reality to their assistants. I also think a clear exposition of the mode of preparing accounts is most necessary.

I would suggest a departmental manual, on the principle of those issued to every railway officer, which should be revised twice yearly, but remain as far as possible unaltered between the periods of revision. I think that an assistant superintendent, an inspector, and an assistant, might be profitably employed as a committee to be engaged solely in compiling and revising the existing rules. The so called revised rules now sold to the public are useless and liable to mislead in many particulars. The polymetrical table also requires considerable expansion.

IV. Lines.

The importance of the efficient conservancy of the lines cannot be over-estimated. The reconstruction of lines in Bengal circle has reduced the interruptions during the present rainy season almost to a minimum, and I now consider the substitution of an efficient system of insulation, for that on the Brooke principle, as the only thing wanting to make the overground lines perfect.

There are, however, several rivers cabled which might be spanned, such as the Ganges at Benares, the Soane at Dehree, and the Damooda at Raneeunge. The first cost would be heavy, but so is that of cables, and the ultimate saving could not but be very great.

About six months ago I obtained permission to do away with the system of line riders in Bengal, and, in lieu, to place each section of line under the charge of an overseer, who would be responsible to his inspector for its efficient working. This measure has, I submit, resulted in greatly increased efficiency at a reduced cost.

The extension of the double line to Agra has also contributed very much to the improved working of the Bengal circle, and it is, I think, probable, or indeed certain, that the advantages which would accrue from the existence of a double line on all our primary routes would more than counterbalance the mere prime cost of erecting a second wire on our present supports. One line would then be available solely for direct working between distant stations, the other for local work. One of the greatest hindrances the department has now to contend with is the choking of lines from overwork.

SCALE of Pay for Signallers.

Year's Service.	Superior.	Good.	Ordinary.	Indifferent.
	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
10	120	100	70	60
9	120	100	70	60
8	100	90	70	60
7	100	90	60	60
6	100	80	60	50
5	90	80	60	50
4	80	70	50	50
3	65	60	50	40
2	50	50	40	40
1	40	40	40	40

(signed) *J. H. Lane,*
Superintendent, Bengal Circle,
Officiating Storekeeper.

(Home Department.—Electric Telegraph.—No. 1626.)

From A. M. Monteath, Esq., Under Secretary to the Government of India, to Colonel C. Douglas, Director General of Telegraphs in India.

Sir,

Simla, 17 June 1865.

I AM directed to acknowledge the receipt, on the 12th April, of your letter No. 2939, dated the 1st February, reporting on the defective working of the telegraph department, and on the measures required for promoting its efficiency.

2. This report is a reply to a call made upon you last July; and for the excessive delay which has been allowed to take place in its submission, I am instructed to express the extreme dissatisfaction of the Governor General in Council. This delay is the more vexatious and reprehensible, inasmuch as the imperfect manner in which some of the matters discussed in the report have been submitted, precludes the possibility of a decision upon them being at once come to.

3. Regarding the promotion of the efficiency of the department, you state that the steps taken towards the reconstruction of temporary and permanent lines, as well as the measures adopted for remedying the great evil of defective insulation, have already produced improvement in the working of some lines, and afford ground for expecting a still further and more general improvement, as the operations now in progress advance towards completion. You further report upon the expediency of other measures required to place the department on a satisfactory footing: these measures may conveniently be enumerated as follows, viz.:—

I. Revision of the rate of charge for messages, with the view of raising the receipts of the department.

II. Improvement of the signalling establishment.

III. Improving of the upper grades of the departmental agency, viz., directors, superintendents, assistant superintendents, inspectors, and overseers.

4. Respecting these several points, remarks will now be made; and it is desired that the further treatment of each of them by you may be separate and distinct.

5. The two first points in the enumeration given above are regarded by the Governor General in Council as by far the most important; and it is particularly necessary that, in dealing with each of them, no delay whatever should be allowed to take place. To this necessity his Excellency in Council desires me strongly to draw your attention.

6. The question of increasing the receipts of the department by a revision of the rate of charge for telegraph messages, was one of the points specially indicated for your consideration in the orders of July last; and the facts brought forward in your present letter, respecting the extent of the deficit* of present income, as compared with present working expenses; the necessity of incurring a still larger expenditure, with the view of providing a more efficient working establishment; and the smallness of the present rate of charge for messages, as compared with the rates adopted in the telegraphs of other countries, strongly support the expediency and propriety of a considerable increase in the scale by which at present the charge for messages is regulated.

	Rs.
* Present annual income - -	9,36,000
Present working expenses - -	14,23,000
Deficit - Rs.	4,87,000

7. In providing for this object, the first question for consideration is the measure of increase which it may be proper to adopt as the basis of the revision, and on this point the Governor General in Council thinks that the new rates should be calculated to produce, on the assumption of the present number of messages, an increase in the receipts of from 25 to 33 per cent. on the existing amount of the receipts, so as to make the department, after giving it credit for the amount received for service messages, self-supporting.

8. The next question is the precise form which the required revision of rates should take, and on this point you make the suggestions noted in the margin*. You further point out that the present method of charge in the direct ratio of distances is "radically defective," inasmuch as the transmission of a message over a longer distance does not involve a proportionately larger cost to the department, owing to the fact of there being "certain fixed departmental expenses" common to all messages alike, whatever their length or the distances over which they have to be conveyed." You, therefore, propose that the revised scale should be based on one or other of the two following systems, viz.:—

(1.) To have a fixed fee representing the fixed expenses common to all messages, supplemented by a distance charge, representing the relative expenses of messages over different distances; or,

(2.) To have a polymetrical table of charges between all offices,—the charges being calculated in the most equitable manner possible, with reference not only to the fixed expenses common to all messages, and the varying expenses dependent on distance, but to the local traffic and paying character of each line.

9. The

* (1.) To reduce the number of "free" words, in assimilation to the practice in force on the Indo-European line, and on the lines worked in accordance with the rules of the Brussels Convention.

(2.) Instead of charging, as at present, for each word in excess of a given minimum, to substitute the system of charging by groups of words,—the group proposed to be adopted being one of 20 words.

(3.) Instead of charging, as at present, by direct distance, to charge according to the shortest distance along the telegraph line by which it is possible to convey the message.

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9. The Governor General in Council is inclined to regard the several changes indicated on the margin of the preceding paragraph as advantageous; and, as between the alternative methods of charge quoted in the concluding part of the paragraph, he would express a decided preference for that which contemplates the levy of a fixed fee, together with a distance charge, on the ground not only of the more ready means which you think that mode will afford to the public for the calculation of the cost of messages, but also of the comparative ease with which it can at once be made available, and of the greater facility with which it can, if necessary, be hereafter modified to meet any alteration of circumstances which may arise. The fact that the polymetrical table would, as stated by you, require three months for its preparation, and that any future alteration of rates, and even any future increase in the number of telegraph offices, would require extensive alterations, if not a reconstruction, of the table, seems indeed to the Governor General in Council almost to preclude the consideration of that method of regulating the charges.

* *Vide* this office letter, No. 986, dated 9 Feb. 1863.

10. Having regard, however, to the interest of the general community which is involved in the revision of the rates of charge, and in the selection and elaboration of a really good system as its basis, and also to the relation which it may be found expedient to establish* between the tariffs of Government telegraph lines and those of railway or other private telegraph lines, the Governor General in Council thinks that the subject will be dealt with most safely by a Committee, in which representatives of the East Indian railway and the Eastern Bengal railway might be associated as members with yourself and one other officer.

11. Steps will accordingly be taken at once for nominating a Committee, of which you will be president, for the above object; and a copy of the preceding remarks, so far as they relate to the revision of the rate and system of charge for messages, together with a suitable extract from your report, will be communicated to the members of the Committee, with such general instructions respecting the scope of their deliberations as it may be deemed necessary to give.

12. Meantime, I am desired to request that immediate steps may be taken for preparing and putting in a readily available form such departmental statistics† as the Committee are likely to require, as well as all necessary information, so far as it may be available, respecting the rules and practice, on the points under notice, recognized in European telegraphs, and particularly in the Indo-European line. As it is of great importance to obtain a speedy decision of the question of the mode and rate of charges, the Committee will submit their report as soon as possible.

13. The second point in the enumeration given in para. 3 of this letter has reference to the improvement of the signalling establishment. The Governor General in Council thinks that this branch of the department is undoubtedly the one which needs chiefly to be looked to; and his Excellency in Council regrets to observe that there is no part of your report more unsatisfactory than that in which you treat of this branch, for no specific information is given either as to what exists, or what is proposed for the future.

14. You are requested, therefore, at once to submit a statement showing the grades into which the present signalling establishment is divided, with the salary of each grade, and also the grades and salaries which it is proposed to substitute. The Governor General in Council cannot sanction any such general and indefinite arrangement as that indicated in your 68th para.; and it seems certain to his Excellency in Council that the service will be more attractive if there are fixed classes with fixed salaries, so that all may know what they have to look to.

15. The third point among the subjects mentioned in para. 3 of this letter has reference to the increases proposed by you for the grades in the department above that of signallers. The Governor General in Council is inclined to agree, to a great extent, in your recommendation for increased pay; but it is not satisfactorily shown that the offices of "director" and "superintendent" are both necessary. Your reply on this point (paras. 33 and 34) is entirely insufficient. In the absence of any proof to the contrary, it may not unreasonably be suggested that, given a proper office establishment (which is of course an essential requisite), the Director General should find no difficulty in superintending directly 15 subordinate offices, if these offices are themselves filled by competent and trustworthy persons. The maximum salaries of the present three directors amount to 3,500 rupees per mensem; and if this sum were devoted to improving the position of the superintendents,‡ and strengthening‡ the Director General's Office, there would

† It would, for example, no doubt greatly facilitate the labours of the committee, if a statement can be prepared, showing the number of messages despatched during a given time, say for (separately) two or three hours over given distances, 100, 200, 300, 400 miles, and so on, up to the extreme distance to which a message can be sent by the Indian telegraph.

‡ As follows, for example:—

		Rs.	Rs.
Present	3 Directors, with an aggregate salary of	3,500	
	15 Superintendents, with an aggregate salary of	6,950	
			10,450
Revised	15 Superintendents	2 on 1,000 =	2,000
		2 on 800 =	1,600
		2 on 700 =	1,400
		4 on 600 =	2,400
		5 on 500 =	2,500
	Available for strengthening the Director General's office	550	
			10,450

would be no occasion for the further large increase of ($400 \times 1,650 =$) 2,050 rupees, proposed by you in respect of these establishments. A further and clearer explanation, therefore, as to the necessity of retaining the office of director is required; and I am desired to point out that what is wanted in some precise account of the duties which the directors now actually perform, and a precise statement of the grounds on which you hold that those duties cannot be devolved partly on the Director General's Office, so far as they relate directly to the control and supervision of the superintendents, and partly on the superintendents, so far as they relate to the direct control and supervision of the telegraph offices and lines.

16. Respecting the proposed revision of the grades of assistant superintendents, inspectors, and overseers, at an aggregate increase of Rs. 12,461. 3. 3. per mensem, the Governor General in Council, I am to say, does not doubt the expediency of improving the position of these classes, and he will be disposed to view their case favourably in the event of its being found possible to meet the additional expense by an adequate increase in the receipts of the department.

17. In regard to the remarks made in the 71st para. of your letter respecting the abolition of unremunerative offices, and the reduction in the number of continuous service offices, I am desired to request that definite proposals may be separately submitted, without delay, regarding such offices as you consider it possible and desirable to reduce.

I have, &c.

(signed) A. M. Monteat,.

Under Secretary to the Government of India.

From A. M. Monteat, Esq., Under-Secretary to the Government of India, to the Secretary to the Government of Bengal, Public Works Department (No. 1935); dated Simla, 29th June 1865.

THE Governor General in Council having resolved upon the appointment of a committee for the revision of the rates and system of charges for telegraphic messages, I am directed to request that Captain Taylor, the consulting engineer in the Railway Department, may be desired to put himself in communication with the Director General of Telegraphs in India, with a view to carrying out the wishes of the Government of India, as expressed in the accompanying extract* of a letter to the Director General, dated the 17th instant.

2. The Governor General also desires that the Lieutenant Governor will be good enough to invite the agents of the East Indian Railway Company and the Eastern Bengal Railway Company, each to name an officer of his company who may be associated with the Director General of Telegraphs and Captain Taylor, and to desire such officer, to put themselves in communication with the Director General of Telegraphs.

* Paras. 6 to 10, and part of para. 11, down to "above object."

(No. 1936.)

COPY forwarded to the Director General of Telegraphs, for information and guidance.

No. 1937.)

RESOLUTION in the Home Department (Electric Telegraph), dated Simla, 29 June 1865.

READ the following papers:—

From the Director General of Telegraphs in India (No. 2939), dated 1 February 1865, to the Director General of Telegraphs in India (No. 1626), dated 17 June 1865.

OBSERVATIONS.—The figures on the margin show the present sanctioned establishment of signallers in the Telegraph Department; but in Colonel Douglas's report, dated the 1st February, it is stated that, on the 31st of July last there were actually only 814 on the establishment, of whom the very large number of 129 were probationers who had never joined office.

2. It is not possible with prudence to give any definite orders respecting the numbers and the pay of the signallers, until the Government receives a further report on the subject; but since the insufficiency of the signallers' pay and of their numbers is rapidly affecting the efficiency of the department, the Governor General in Council considers that it is expedient to give a general intimation to the Director General that, as respects numbers, he may, if necessary, in anticipation of sanction, increase the strength within the limit of 1,000 signallers, the number named by Colonel Douglas in his report; and also that the Government will, at once, if he thinks it desirable, authorise the raising of the first four classes to 150, 125, 100 and 80 rupees a month, respectively. The increase involved by this will be 2,350 rupees a month, being an increase of 22.1 per cent. on the present aggregate salaries of the four classes.

3. This increase will, it is presumed, include many of those to whom an increase has already been given by order of the Commissioner of Scinde.

4. It seems desirable also to the Governor General in Council that sanction should at once be given to the additional allowances proposed in para. 67 of Colonel Douglas's

	Rs.	Rs.
20 at	120 =	2,400
30 "	100 =	3,000
30 "	80 =	2,400
40 "	70 =	2,800
65 "	60 ¹ =	3,900
127 "	50 ² =	6,350
128 "	40 ³ =	5,120
130 "	35 ⁴ =	4,550
130 "	30 ⁵ =	3,900
30 "	25 =	750
30 "	20 =	600
30 "	17 ¹ / ₂ =	525
30 "	15 =	450
820, of whom		36,745
160 are		
Natives.		
1-5		
2-7		
3-8		
4-10		
5-10		
6		
All Natives.		
(120)		
160		
Report,		

App. No. 2.

report, for one signaller in each office (or rather in three-fourths of the offices), as deputy assistant in charge. The increase is stated by Colonel Douglas at 1,945 rupees a month.

5. The Governor General in Council would further authorise the additional allowance proposed in para. 66 of Colonel Douglas's report, for the head assistant in charge in the 51 offices in which that allowance is not now drawn. The real increase (at an average of 30 rupees a month) will be 1,530 rupees. Colonel Douglas states it as only 550 rupees; but this is based on a comparison with the sanctioned scale of allowances, which are not at present fully drawn.

(signed) *E. C. Bayley*,
Secretary to the Government of India.

ORDERED that the papers noted above be forwarded, with the foregoing observations, to the Financial Department, for early consideration of the proposals regarding the telegraph signalling establishment, and with an intimation that an increase of the rates of charge for messages is under consideration, whereby it is hoped that the receipts of the department may be made to cover all charges.

(No. 1178.)

RESOLUTION in the Financial Department; dated Simla, 3 July 1865.

RESOLUTION.—The Governor General in Council is pleased to sanction the increases recommended above, on the understanding that the charges will be shortly raised on all messages to meet these increased expenses of the Telegraph Department, and that wherever increases of salaries are made in consequence of this order, the compensation on account of dearness of provisions will cease.

Ordered that the above be communicated to the Home Department, and the Auditor General of India.

(signed) *E. H. Lushington*,
Secretary to the Government of India.

(No. 2189.)

COPY forwarded for information to the Director General of Telegraphs in India.

Home Department, Simla,
7 July 1865.

By Order,
A. M. Monteath,
Under Secretary to the Government of India.

(Home Department.—Electric Telegraph.—No. 6 of 1866.)

To the Right Honourable Sir *Charles Wood*, Bart., G.C.B., Secretary of State for India; dated Fort William, 25 January 1866.

Sir,

WITH reference to the despatches noted on the margin, we have the honour to transmit for your information the accompanying copy of a Report by the Director General on the re-organization of the Telegraph Department in India, together with a copy of our Resolution thereon.

To Secretary of State, No. 6, of 1865, dated 7 July.
" " No. 8, of 1865 " 2 October.
" " No. 13, of 1865 " 23 Oct., para. 2.
From Director General of Telegraphs, No. 171A, dated 18 Oct. 1865.
Resolution, No. 4877, dated 8 December 1865.

We have, &c.

John Lawrence.
W. H. Mansfield.
H. S. Maine.
W. Grey.
G. N. Taylor.
W. N. Massey.
H. M. Durand.

(No. 171A.)

From Lieutenant Colonel *D. G. Robinson*, R.E., Officiating Director General of Telegraphs in India, to *E. C. Bayley*, Esquire, Secretary to the Government of India; dated Landour, 18 October 1865.

As promised in previous correspondence, I have now the honour to report on what I conceive to be necessary for making the organization of this department really effective.

2. The

2. The objects to be arrived at are clearly—

1st.—To remove all extra friction.

2nd.—To maintain an effective and complete administrative and executive staff at the least possible cost.

3rd.—To obtain prompt and accurate audit of expenditure by the simplest possible means.

3. To obtain the 1st, I propose to reduce the number of channels of communication to a minimum, and for this purpose to abolish the post of director.

4. For the 2nd, I propose that superintendents shall correspond direct with the Director General, and that they be vested with powers and duties approximating to those of Superintending Engineers, or Postmasters General; to relieve them of all compilation or audit of accounts; to make their principal business that of direct and active inspection and supervision; and to make the accounts of the line officers as simple as possible.

5. For the 3d, I purpose to classify all expenditure under two heads,—Personal, and Material.

6. All expenditure for salaries or personal allowances of any kind, in which the Director General or the Department can be considered to have any personal interest or bias, is personal, and should be audited as at present by the Examiners of Claims, and the Auditor General. All expenditure for construction, works, &c., from which no member of the Department can derive direct advantage, should be compiled and audited in a Central Office of Accounts, organised somewhat similar to that of the Public Works Department. Personal expenditure should be further subdivided into its permanent and variable elements. Permanent expenditure, such as salaries and allowances, upon which there ought to be no retrenchment, should be paid on "presentation of bill." Variable charges, open to retrenchment, such as contingent bills, should be audited before payment by the Director General, who is the fittest person to judge of what is, or is not, legitimate expenditure.

7. I would divide the staff into an upper and lower branch. The superior branch should contain none but gentlemen by education and feeling, whose promotion, posting, &c., would appear in the "Gazette" of India; the subordinate, of men selected from the signallers, good non-commissioned officers from the army, or other of the artisan class.*

8. I would give increase of pay every two years; but, as an encouragement to zeal and activity, I would shorten the period for the very deserving, and lengthen it for those who did not give satisfaction.

9. To secure promptness in every branch, executives must understand their work; hence the compiler of accounts, the assistants in the Director General's office, the message check office, the storekeeper's office, the foreman of the workshop, in fact every one but the mere copyists, should be departmental. Returns should be as few and as simple as possible, and all proceedings should be regulated by a code or manual, divided into two parts: Part I. should define the powers and privileges of the various officers of the department; Part II. should refer to professional matter regarding the instruments, &c.

10. To simplify the checking of cash collections, examination of messages, and other work performed by the check office, I propose an establishment which will fluctuate with the number of messages received.

11. I propose to abolish all allowances for house rent, except at the Presidency of Calcutta, and one or two other sanctioned exceptional places, giving increase of salary in lieu thereof, which will improve the status of the members of the department without any very large increase of expenditure.

12. I propose to make the accounts and returns of the line officers as simple as possible, leaving their compilation to skilled accountants; to modify the nomenclature of the ranks to one more suited to the work and the duties of the executive, and to arrange the salaries on a scale which will work more evenly, and consequently more fairly than that now existing; to increase the staff of that useful class now called overseers, and to make the position of the signallers more respectable, not so much by increased pay as by more generous and considerate treatment with regard to the quarters provided for them, and by the creation of an *esprit de corps*.

13. The modifications of nomenclature, which I recommend, are—to call the 1st, 2nd and 3rd inspectors, 2nd, 3rd and 4th assistant superintendents; the present overseers, inspectors; and the present assistants and deputy assistants in charge of signal office, telegraph masters and deputy telegraph masters. The sanction of Government has already been given to the 1st proposition (Home Office, No. 2216 of 20th September 1865):—"Inspector" is clearly a more appropriate name for an inspecting officer than overseer, and "telegraph master" than assistant in charge, besides being shorter to telegraph and to write. It also accords with "postmaster," "station master, &c."

14. To establish *esprit de corps* there must be some bond of fellowship, and on this subject Mr. Mansfield, the Commissioner of Sind, has offered some happy suggestions from which I avail myself to recommend the adoption of a uniform for all grades, as is the custom on the Continent of Europe. Marks for good conduct, medals and rewards for continuous good conduct, and special rewards for showing a good knowledge of electricity, and for passing in foreign languages.

* This would not bar deserving men rising from any grade in the subordinate to the highest posts of the superior branch, provided they were qualified by education and good service, and possessed the power of commanding respect and obedience from their subordinates.

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Powers, Functions and Qualifications of the Staff of the Department.

15. I now proceed to detail what I conceive should be the powers, functions, and qualification of the different members of the department.

16. Formerly, when the department was small, the Director General used to pass contingent bills up to 500 rupees; of late years this has been virtually withdrawn.

Director General
should have large
powers to audit.

17. Instead, however, of limiting his audit to 500 rupees only, I propose to give him the same powers in this respect that the Surveyor General and Superintendents of the Revenue and Trigonometrical Survey possess; and for these reasons, viz., that the Director General is the most competent person to judge of what contingent charges are or are not, reasonable; that in ninety-nine cases out of a hundred the greater the responsibility, the greater the care bestowed; and that, as in the instance of the Survey Department, the interest of Government have always been most jealously guarded, there is strong *prima facie* evidence that Government will serve their own interests best by making the "passed" under signature of the Director General, a final audit, except as regards clerical errors.

Examination of
Estimates.

General control.

18. The examination and check of the estimates for construction and repairs, now in the first instance performed by directors, if directors are abolished, will revert to the Director General, who has now the preparation of the Budget and English Estimates, the posting of all members of the superior grades of the department, and the general control of the department, and an enormous amount of correspondence which will be largely increased, as he will have to deal direct with 14 to 20 superintendents instead of through three directors; there will also be great increase of work in an infinity of minor matters connected with the internal economy.

Tours of Inspection.

19. I consider also that it is of the first importance that the Director General make occasional extended tours of inspection; on this I cannot lay too great stress, for it is the general opinion of the public, as well as of the department, that lack of inspection and personal knowledge of the members of the department, of the lines and of the offices, on the part of the Director General, is one of the greatest reasons why the machine has not worked more glibly.

20. The directors and superintendents are theoretically the eyes and hands of the Director General; and where the Superintendent is zealous and capable, but little interference will be required. Unfortunately, however, mortal man is not faultless. Some superintendents maintain great discipline, whilst their accounts are in almost hopeless confusion; others devote themselves to their accounts, and never see their lines and offices. Remarkably few approach perfection; if they did, there would be small need of a Director General. One man is able and vigorous, but captious or unreasonable, and cannot therefore be satisfied; another is prejudiced, another inconsistent or impolitic; and many too indolent or too good-natured to keep their subordinates up to the mark. Hence, however excellent the theory may be, it is indisputable that practically the visions of subordinates not only differ *inter se*, but do not produce the same effect as the master's eye. The Director General may, as hitherto, sit at the top of a three-storied house, and blindly and theoretically administer through the eyes of his superintendents, but practically he cannot avoid injustice, and maintain uniformity or efficiency unless he has a fair knowledge of the tools and machinery he has to work with,—and this he can only obtain by tours of inspection.

Necessity for a
Deputy Director
General.

21. But it is clearly beyond the power of one man to perform all these purely ministerial duties, in a prompt or efficient manner, unassisted. The Director General must, therefore, have a deputy to assist in the administration, in addition to his scientific adviser (necessity for whom I am not yet prepared to advocate, though the idea of having one seems sound).

Deputy Director
General's duties.

Duties of Deputy
Director General.

22. The Deputy Director General should be the *alter ego* of the Director General, as regards the ministerial offices. When both are at head quarters he would assist in all current work, especially in the examination of estimates, bills, &c.; replies to applications for admissions, petitions, &c. (very numerous). His special business would, however, be to look after the head quarters' office when the Director General was absent, and to go on tour when the Director General found it inconvenient to do so. His signature to contingent bills, estimates, and returns, should be taken as equally binding with that of the Director General, but he should not be considered competent to issue departmental orders, or in other ways interfere in the administration of the department. Even on inspection duty, he would report for orders to the Director General any serious matters that came to his notice.

Superintendent's
duties and power.

Duties of
Superintendents.

23. The functions of the superintendent should approximate very nearly to those of a Superintending Engineer of the Department Public Works,* and if not superior, his power should be equal to that of the present directors. He should correspond direct with the Director General. He should be authorised to sanction urgent repairs to the extent of 1,000 rupees and ordinary repairs to 250 rupees, for one item. All changes and postings of signallers should be made by him, or through him; all internal arrangements of his Circle should devolve on him, subject to confirmation. He should apply for the letters-of-credit required for each line officer of his Circle, and countersign all bills—contingent, variable, or constructive; but he should not be expected to audit or compile the accounts connected with them, as is now the case.

24. At the commencement of each financial year he would be informed of the Budget Grant for his Circle, and be responsible that the grant was not exceeded; the only accounts he

* *Vide* General Rules for Department Officers, "Public Works Code."

he would keep, would be for his own and his personal establishment salary bills. The examination of the cash collections by him is useless, and may be discontinued. He should carefully criticise and countersign all the estimates for repairs, all plans for buildings, &c., all returns; and submit in one schedule all the revised estimates of his Circle.

25. From this it is clear that my wish is that his special duty be, direct personal supervision of everybody and everything connected with his department in his Circle, and to free him as much as possible of executive or office work.

26. He would consequently be held responsible for the system, accuracy, and neatness, with which all the departmental accounts, books, and returns were kept; for the state of the lines and offices, for all changings and postings within his Circle (of which he would advise the Civil Auditor and Director General), and for the maintenance of discipline. His powers of punishment should be regulated by a code based on circulars already issued.

27. He would make a tour of inspection at least once in every six months. Those undertaken in the cold weather should be by easy stages along the line, every portion of which should be examined as he travelled; those in the hot months by dawk, would be more particularly for the inspection of the offices and those parts of the line where it was needed. On these tours he should keep a diary, in which he should enter the place he halted at, and what he had observed during the day; and, on conclusion of his tour, he would frame a report from this diary, which he would submit to the Director General with the original diary. An average of 1,000 miles of line and offices is quite enough for any one superintendent.

28. The personal assistant, storekeeper, head of the Cash-checking Office, and of the Central Office of Accounts, should be either superintendents on the regular establishment, or graded with them. The establishment of superintendents should, therefore, be as follows:—

Superintendent, Store Department -	-	-	-	1
Personal Assistant to Director General -	-	-	-	1
14,271 miles of line (Superintendents) -	-	-	-	14
Head of Cash-checking Office -	-	-	-	1
Controllor for Central Office of Accounts*	-	-	-	1
Total	-	-	-	18

29. The number of line superintendents should vary with the length of line, an additional superintendent should be given for every extra thousand or fraction above five hundred miles.

30. At present the sanctioned number of assistant superintendents of all grades is (103) one hundred and three (divided into four classes). This does not include inspectors.

I propose to promote all, who are not undeserving, periodically; to shorten the period for those who are very deserving; whilst promotion would be withheld from those who give dissatisfaction. By this arrangement the numbers of the grade of, and above, superintendent would be fixed; whilst the numbers in each class of the assistant superintendents would vary with their lengths of service, combined with good conduct.

31. This arrangement for a young and small department, officered by young men of almost equal service and claims, is evidently more just than that which now exists.

32. Under the present organisation a few days' seniority, or the good luck of having attracted the attention of their superiors, has the most vital effect on an assistant superintendent's future advancement. The directors who draw 800 rupees a month are very little senior to many almost equally good men, who are drawing only 250 rupees a month. Promotion on the present system must be cruelly slow; 15 years hence it will be too fast; it never can be regular, though time will ameliorate the evil.

33. All heavy works of construction or of re-construction, and all repairs should devolve on assistant superintendents of the 1st class; when not so employed they should assist in the inspection and office duties of large and important circles, and in the office of the Director General or Central Office of Accounts, &c. They should be considered as in training for the post of superintendent, and employed accordingly. They should not rise by right of seniority to be superintendents, but be promoted for ability, zeal, and good business habits; at the same time seniority should be considered to give great claim, and a good assistant superintendent should not be lightly passed over, because a junior was, in the opinion of the Director General, somewhat better.

34. In the natural course of events there must always be some assistant superintendents acting for superintendents on leave, &c.; and hence each would in turn, whilst so acting, demonstrate his fitness for the substantive appointment.

35. II., III., and IV. assistant superintendents also are executive line officers, employed in keeping old lines in good order, and in construction, &c. Their duties should, indeed, be the same as those of the 1st class, but in a smaller way; they should not interfere in the offices, except by order of the superintendent of their Circle. An assistant superintendent should be placed in special charge of a short length of line, 200 to 500 miles, according to its accessibility, and be required to inspect it not less frequently than once in two months. He should forward his diaries and reports, on the conclusion of each tour, to the superintendent; who, guided by these reports, would issue the necessary orders for petty or urgent repairs within his power to sanction, or make such other arrangements

as

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Responsibilities.

Superintendents' tours of inspection.

Number of Superintendents required.

Assistant Superintendents.

Arrangement for Senior Grade being fixed in number, and Junior Grades fluctuating, according to length of service.

Bad effects of present system.

Duties of 1st Class Assistant Superintendent.

Rules for promotion to Superintendent.

Duties of II., III., and IV. Assistant Superintendents.

* Possibly not departmental.

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as appeared necessary. Large and important signal offices are also placed in charge of assistant superintendents.

36. All assistant superintendents are, more or less, executive officers, and have to keep accounts. These accounts have hitherto been far too complex, and passed through too many channels. They have effectually prevented that active practical supervision so imperative to efficiency, and at the same time have involved every one connected with them in trouble. By reducing them to the simple form, to be explained under the head of "Accounts," superintendents will be freed from all compilation, and executive officers' labours in this direction will be reduced to a minimum, and hence a more effective administration be obtained from a smaller number of officers.

Terms on which
Assistant
Superintendents are
to be appointed.

37. Assistant superintendents should be admitted, as hitherto, on passing a suitable examination either in England or in this country. They should all be bound by the same covenant, except as regards passage to and from England which would not be given free to those appointed in this country. An assistant superintendent should pass in the vernacular before he gets any promotion; and in Hindoostanee (P.H.), or other local dialect, before promotion to grade of superintendent.

38. If one assistant superintendent be allowed to every 250 miles of lines, we have $\frac{14950}{250}$:

Assistant Superintendents	-	-	-	-	-	-	-	-	-	57
In charge of important offices	-	-	-	-	-	-	-	-	-	7
Store-yard	-	-	-	-	-	-	-	-	-	2
Head Quarters' Offices	-	-	-	-	-	-	-	-	-	2
Special, such as expeditions to Bhootan, new lines under construction	-	-	-	-	-	-	-	-	-	10
Contingent to take the places of those sick, on leave, &c., acting superintendents, &c.	-	-	-	-	-	-	-	-	-	10
Total	-	-	-	-	-	-	-	-	-	88

As the new grade of inspectors are filled up, we shall manage to work with still fewer, unless the lines be extended, as I suppose they will.

Inspectors.

39. I propose to supplement the assistant superintendent with a grade of "inspector" hitherto called overseers. In 1853-54, 60 men selected from the army, and trained at Warley, were brought out to India as "Warley Artificers." Of these a few have worked hard, educated themselves, and gradually risen into the higher grades; many have died or left the department, but very few remain. Although not exactly scientific officers, and hardly capable of undertaking construction without supervision, they are a very useful and economical class of public servants. Instead, therefore, of allowing them to die out, as is now rapidly coming to pass, I propose to recruit this grade largely from deserving signallers, who will thus have the road to further advancement thrown open to them, whilst Government should reap advantage from their practical knowledge of batteries and instruments, and thorough appreciation of the value of good insulation.

40. If a sufficient number of intelligent well-behaved signallers are not forthcoming, I would accept good non-commissioned officers from the Roorkee College, especially from those who had distinguished themselves in chemistry and other natural sciences. Well-behaved men, unable to pass the prescribed examinations for assistant superintendents, but in other respects desirable candidates, might be taken in as signallers or as inspectors, with the prospect of qualifying for admission into the higher grades hereafter. As this is almost an experiment, I would limit the number at first to 50. If it proves successful, fewer assistant superintendents will be required; the grade may be extended hereafter, and perhaps thrown open to natives.

Signallers.

41. I now come to the signalling, the most necessary and important branch of the departmental staff. If this be faulty, any amount of care, of money, or thought, expended on lines and supervision becomes of no avail. In no other branch is reform so urgently required. Attention has been called to it by the public press, the Commissioner of Scinde, and many others, most of whom have made suggestions for its improvement, some practicable, some utopian, but all insisting on increase of salary and the entertainment of a better class of men.

42. This at first sight seems rational enough; but, before accepting this conclusion, it will be well to consider what are the peculiar qualifications which make a good signaller.

43. Signalling is, at the best, a very monotonous employment. The novelty soon wears off, and the contents of the messages soon cease to be interesting or amusing, however quaint they may be. A signaller must, therefore, be very patient.

44. Neither is it of great importance that their handwriting should be elegant, a neat fast hand is rarely a clear hand, and what is required in the message is something unmistakable. When some one observed to Commissioner Mayne (I think it was), that he might get a much better class of men to report the English deaths, births, and marriages, if he would pay higher, he replied: "That is just what I want to avoid—the great, coarse, large text letters of the names sent to me by rural clodhoppers are unmistakable, there is no mistaking e for c or i, whereas there would be constant mistakes with pretty running hands. So in the telegraph department, signallers should write down the letters as telegraphed in a large clear round hand, paying little attention to speed or beauty.

Class from which
Signallers should be
obtained.

45. It follows, then, I think, that for mere signallers, as signallers, it is questionable if a better educated superior class will afford greater satisfaction than a patient, plodding, steady, unambitious body of men—blessed with delicate perception of sound and touch, and kept honest and contented by paying them well in proportion to their social position and birth, and by giving them a tangible proof of interest being taken in their welfare.

The

The assistants in charge, telegraph masters and their deputies, must be of superior education, and may be selected as hitherto from the signallers. As has hitherto been the case, some superior men would probably enter with the hope and prospect of rising gradually to the highest positions in the department. I see no reason either why the wives and daughters* of signallers should not also be signallers. In London women are extensively employed in this way.

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Assistants in charge,
Telegraph Masters.

46. I am not at present prepared to recommend any large increase of salaries to this branch, but I cannot express how anxious I am to obtain for them more considerate treatment, a course of action that must produce happy results.

47. The following measures appear calculated to attain some of these ends at small expense.

48. To make their quarters so comfortable that they shall prefer remaining in them to living in the bazaars or elsewhere; 2nd, to encourage morality and cleanliness; and 3rd, to establish an "*esprit de corps*."

49. Signallers are, or ought to be, changed constantly. It is not desirable that they, or the telegraph masters, should remain long in the same place, especially in large mercantile towns, where speculation is rife and bribes may be offered. There are very few instances on record of signallers having taken bribes; but I suspect they often ask questions by telegraph (calling it practice) from a neighbouring station to oblige a friend. This is quite contrary to orders, but almost as impossible to prevent and as harmless as the non-official remarks, or news communicated in demi-official letters under frank. To limit these evils, and to prevent their becoming wedded to a place, as well as to give all a fair share of good and bad stations, telegraph officials should all be relieved periodically like troops.

Frequent relief of
Signallers.

50. But if men are moved often they cannot afford to set themselves up at each station. I therefore recommend that each signal office shall be furnished by Government with a small quantity of good plain substantial furniture, for which the telegraph master should be held responsible. Tatties and chicks should also be allowed, and pecuniary encouragement given for the formation of small libraries of books at each office.

Telegraph Offices to
be furnished by
Government.

51. To encourage morality and cleanliness, a commencement must be made at the foundation. In my letter No. 1115, of the 16th August, I brought the state of the Barrackpore Probationers School to the notice of the Government, and solicited assistance for its improvement. As mentioned in that letter, sufficient pains are taken to instruct the boys in their profession, but no care whatever is taken to keep them out of mischief during their hours of relaxation. The master of the school (an East Indian) is the assistant in charge of the Barrackpore Telegraph Office. He receives as remuneration for each probationer two rupees per mensem. He has an office to attend to, and although happy and comfortable enough himself, he has neither time nor inclination to look after the lads, their habits, or their comforts, out of hours.

Training Schools.

52. Thus a grand opportunity for implanting good principles into these young lads, which might influence their characters for life, at the very age too when they are most impressible, is lost. In fact, there is no school whatever, it is simply a training class, supplemented by an adjacent empty bungalow, in which these youngsters may find shelter on the same terms as the pariah dogs, and are, in truth, not one whit more cared for.

53. I propose, in lieu of this, to have a training school (not class) for each province under a local government or administration. The school-house should be the property of Government, furnished with good strong barrack furniture, found in cooking utensils and establishment, lavatories, &c., all complete, much the same as the Lawrence Asylum. The lads would mess together, and be kept under an almost military discipline, by the school-master, who would live in the same house with them, dine with them, and be as much with them as possible, and be assisted by one or two monitors elected from the lads themselves; these lads should always be in uniform and kept within bounds, attend chapel at regular hours, and treated as cadets.

54. The schoolmasters, if possible, educated in England, should be selected from the (new) grade of inspectors for special aptitude. They would get free quarters and an allowance for each probationer.

55. The Superintendent of the Circle would be expected to consider the welfare of the school and scholars one of his most important duties, and the chaplain to be a frequent visitor, and the chief civil authority an *ex-officio* visitor. The lads should be regularly rationed, paying for the same out of their own pay, and be found in uniform, as should all below the grade of assistant superintendents, at the expense of Government. The present term of probation is four months; I recommend that it be extended to six; the additional time would be well spent in moral culture and in acquiring a clear round-hand style of writing (not a running hand), practice with the signal instrument, and an elementary knowledge of electricity and construction; any probationer who could not send and receive 10 words a minute after three months should be discharged. Gross misconduct on the part of a probationer would involve summary expulsion.

56. At present there is small prospect of the proposed nine schools enumerated in the margin, producing a sufficiency of signallers; but if well conducted, I think that, in the course of a few years, the supply may exceed the demand, and it may become desirable to abolish some of them.

Bengal, N. W.
Provinces, Punjab,
Scind, Bombay,
Rajpoot, Madras,
Ceylon, Pegu.

57. After leaving school and entering office, signallers would still be under control of the

* We have one lady signaller, the daughter of Mr. Assistant Superintendent Knop, Miss Ida Knop.
0.43. 3 x 3

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Offices.

the telegraph masters; and, besides being deterred by fear of punishment from misbehaviour, they should be encouraged to be steady by rewards, which should be partly pecuniary, partly honorary.

58. The offices should be the property of Government, and pukka. The practice of renting a bungalow is inconvenient, besides in other respects objectionable; the owner may raise the rent, or refuse to continue to rent it,* or it may catch fire, costing the Government its value, and the value of the instruments and records. Government, through the Department Public Works, has built some, and is building more.

59. The size and plan of the house must depend on the climate, the number of signallers to be accommodated, and the number of instruments. It should be commodious enough to admit of a small ante or receiving room, a signal-room, battery closet, sitting, bed, and bath room for the telegraph master (assistant in charge); one room for deputy telegraph master (where one is required), not less than (60) 60 superficial feet of bed room to each signaller, one bath room to every four signallers, and a mess or sitting-room, containing not less than 40 superficial feet for each signaller. A spare room and bath room for the temporary accommodation of the inspecting officers, but no permanent accommodation for any line or supervising officer, as has hitherto been the practice at some stations. A strong box for cash should be built into the wall of the signal-room in every office.

60. The number of signallers must fluctuate with the number of offices, and amount of traffic; as new offices are opened, or the traffic increases, more men must be granted. If the number be calculated on the basis of (3) three signallers to each instrument on lines on which the traffic is continuous, two for each instrument where it is less, and one where it is small, each signaller would have a fair amount of work, and the total would amount to 753, exclusive of 171 telegraph masters (assistants in charge), or 924 in all. *vide* Appendix (A.) Add for contingencies, bank offices, special expeditions,† absent, sick, and on leave, *en route* to join, or in relief, 10 per cent. (less will not suffice), the total number required will be, signallers, 832, telegraph masters, 188; total, 1,020.

61. The amount of casualties is now 16 per cent. per annum, not including deaths; to meet these 81 probationers are required, six months being allowed for the completion of a probationer's education. In time we may hope to make the department sufficiently popular to largely reduce this per-centage; but meanwhile we have, by the last returns, no less than 185 signallers wanting to complete the above necessary establishment, and cannot therefore go wrong in recruiting our schools to the extent of 185×80 , to meet casualties to be incurred in the next (6) six months, or 265 in all. At the present moment 105 only are in training.

62. The line riders and other office servants should remain much the same as at present, with the exception of the peons, who must be better paid if the service is to be made sufficiently valuable to them, to ensure honesty and celerity in their movements.

Ministerial
and Office
Establishments.
Central Office of
Accounts.

63. If an organisation such as I have above sketched out be sanctioned, directors and superintendents' office establishments will be reduced to less than one-half. This saving will provide ample means for the formation of a central office of accounts, the precise strength and expense of which I am unable at present to define. At first it must, to some extent, be a matter of experiment, but the expense would certainly be less than the savings accruing from superintendents' offices; whilst from the mere fact of the agents being skilled accountants, with nothing to undo and no other work to divert their attention, compilation of the accounts would proceed more rapidly, systematically, and therefore satisfactorily, than can be expected from executives unfamiliar with book-keeping.

64. The accounts of the Superintendent of Stores, the return of annual expenditure, including salaries, and other bills paid and audited by the Accountant General, the estimates and budgets, should all be compiled in this central office, which should be presided over by a controller, assisted by competent accountants.

Superintendent of
Stores, Storekeepers,
and Store-yard.

65. The Superintendent of Stores occupies at present a false position, he is superintendent of the workshops and of the artificers employed therein, itself a very important duty. He lands stores from ships, ships stores, purchases in the market, checks the estimates for cost of telegraph material, wire, &c., and has to furnish all the accounts connected with them. His correspondence is enormous; and, as may be at once surmised, he has several lacs of arrears of accounts, an insufficient check on the workmen and on the disbursements, and in fact can do nothing completely. In addition he has the printing press,‡ which is also inefficient.

66. To assist him he has a practical engineer, the foreman, who is responsible for the machinery being in good order, and the work being well executed. This is so far right; but the magnitude of the workshops is so considerable,§ that another responsible person is required (who should be an inspector of the new grade) to check the work done. This inspector should keep a record, showing the hours at which the artificers come to work (this is now done), the work they are employed on (not done now), whence to ascertain the cost of each article made up or repaired, record of fines for late attendance, absence without leave,

* As has happened quite lately at Jeypore and Gawalparah.

† Such as that contemplated for Bhootan.

‡ Will probably hereafter be dispensed with.

§ All India is dependent on them for repairs and alterations of instruments, machinery, top-pieces, &c., and Bengal for masts, boats, office furniture, &c.

leave, laziness, &c. (half done), and should prepare the monthly returns and pay bills of the establishment, and make himself generally useful as an overseer.

67. The Superintendent of Stores has already an assistant superintendent to assist him in receiving and disbursing telegraph stores, wire, top-pieces, insulators, instruments of several sorts, stationery, &c. &c., but he must have more aid than this if peculation is to be guarded against. Stores must be classed and made over to native storekeepers, who must give security. These storekeepers must be held responsible for the correctness of the stock records. They should issue to, and receive from, the assistant superintendent on his signed orders and receipts, but have nothing whatever to do with cash, but simply with quantities of material.

68. I propose, too, to make arrangements at each Presidency, or Circle, for a small dépôt, at which spare pieces of telegraph instruments shall be lodged and petty repairs executed. It seems absurd to send to Calcutta for cores (cylinders of soft iron), galvanometers (small coils of wire), and such simple articles which any good native workman can make up. If all the instruments were precisely alike, as they ought to be, with the parts interchangeable. spare screws, spare springs for the keys, and sundry other simple parts, which wear out with use, could be issued to the superintendents at the same time as the instruments, just the same as a gunmaker gives spare nipples, spare main springs, &c., with the guns he sells from his shop.

Establishment of small Dépôts for petty stores.

69. It seems also excess of caution to issue all the wooden top-pieces from Calcutta.* There ought to be no difficulty in obtaining them almost anywhere, or suitable wood—sâl in the North Western Provinces, and teak in Burmah, Madras, and Bombay—all that is necessary is to pass them by a proper committee and officers.

70. The accounts of the store-yard, &c., should be kept in the same simple form as that recommended for executive offices, and should be compiled in the Central Office of Accounts, but this will not lead to any diminution in the Store Office Establishment, which is already too small.

71. After making the above changes, the Superintendent of Stores will have his duties reduced to their proper functions. He will have leisure to see how the work is being done; to carry out the many experiments connected with proving insulators, &c., sent out from England; to maintain system and division of labour, *i. e.*, economy in manufacturing; to introduce improvements, look after the accounts, and become, what he ought to be, a supervisor instead of an executive.

Check Office.

72. The office hitherto called the Complaint Office; or Complaint, Fault, and Cash Checker's Office, but which I have denominated the Check Office, requires an entire re-casting, as recommended by Mr. Kellner nearly three years since.

Check Office must be remodelled.

73. It stands to reason that, for a routine office in which the work is annually increasing at a rate of from 15 to 25 per cent., a fixed establishment will not answer, a corresponding increase in the number of clerks must be made, or the work must fall into arrears at the corresponding rate of from 15 to 25 per cent. per annum. Of late a great deal has been done for accelerating the transaction of business by simplification and printing of forms for letters, accounts, &c., but the limit in that direction has now been reached, or nearly so, as regards the complaints and cash checking, whilst nothing whatever has been done for the tracing and discovery of faults, because there is absolutely no establishment available for the purpose. In fact the fault office exists only in imagination, the only faults that are discovered being those brought to light when tracing complaints.

Establishment should vary with the number of messages.

74. It follows, then, that, unless a very large increase of staff be granted for these offices, they will soon be hopelessly in arrears and useless. It is only a few months since that several months of cash collection audit were jumped over (skipped), and the cash checking commenced again with a clean bill from a fresh date; and already they are in arrears again, and must get more and more so unless a suitable establishment, varying month by month according to the number of messages received, be granted.

75. The system pursued in, and the labours and requirements of the check office will be better understood from the following: the check office is divided into three branches: the "cash checking," the "complaint," and "fault office," all working on the same material, *viz.*, the message drafts, all, therefore, necessarily in the same apartment, and all under the same superintendent.

Details of system of checking the Cash Collections.

76. The cash collections are checked thus: certain clerks calculate from each original message what ought to have been paid on that message, compare it with the receipt, and enter this amount in its proper column "service," "private," &c., in an account book under the proper dates. A head clerk then extracts from these books, under their proper heads, into another book the sums received on each day for each office, the amount for the whole month for each office, plus peon hire, should equal the sum acknowledged by the collector as paid into his treasury. One clerk will calculate and enter 150 to 180 ordinary messages in a day, and one head clerk can compile the six computers' work. To assist in bringing up, removing, and returning to their pigeon holes the bundles of messages, two sorters are required.

77. The

* Many are of opinion, Colonel P. Stewart was, and I am myself, that wooden top-pieces are a mistake, the whole should be of iron, and dependence placed on the insulators for non-conduction.

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77. The present traffic being an average of 1,350 original messages per diem, one and one-third compilers, eight checkers or calculators, and two sorters, are needed to check the cash collections.

78. To trace and answer complaints.—A head tracer and replier to letters, four sorters to fetch the messages called for and return them to their places, one registrar, and one clerk, who also would prepare monthly returns, pay bills, &c., required.

Service messages examination.

79. For the examination of service messages, one clerk is required.

Process required for detection of faults.

80. In order to discover the faults in messages it is absolutely necessary in the first instance to compare the received and the original messages. If they agree nothing further is required; if they disagree the original must be compared with each copy taken, until the faults are traced to the proper offices. From the above it is evident that this is a very tedious process, and will require a strong staff,—a stronger staff than perhaps at first sight the process appears to be worthy of. There can, however, be no question that though it will cost a good deal of money, it will deter many from faults of omission and commission, and ensure amendment and public confidence.

System necessary for detection of faults.

81. By giving different colours to the papers and envelopes of original, transit, and received (issued) messages, with a distinguishing letter to each message, the pairing of all the messages will be facilitated, and once paired, the comparison ought to proceed pretty rapidly. It must, however, be kept in mind that if 100 messages be issued from a station in one day to 100 different stations, the copies of the issued messages will be received in the check office, Calcutta, in 100 different packets, arriving at different times from the 100 stations to which they were issued, besides copies from transit stations. Hence to pair the messages, several sortings will be required; one set of sorters must open the message packets, and throw each message according to its original station into its box or compartment. This will bring all the messages from any one station together, they must then be paired by a second sorting and then read (*i.e.*, compared) to discover the faults. From experiments made, I believe that (1) one sorter, (1) one pairer, and (2) two comparers, will be required for every 100 messages; that is to say, for present traffic (11) eleven sorters, (14) fourteen pairers, and (28) twenty-eight comparers, will be requisite. I think it very probable that, after a little practice, the work might be performed by a much smaller staff; but until it has been working for two or three months, I should be sorry to commit myself to a decided estimate. The office servants would be one duffry, one peon, one furrash, onethird sweeper.

82. At present four men are employed in destroying the old messages; this should be done by machinery as more economical and effectual.

Accounts

83. These are at present far too complex. Superintendents, assistant superintendents, and inspectors, have all to compile their accounts instead of simply to render them to skilled accountants. The accounts of executive officers should be as simple as possible. They should keep a cash or day-book, a plain record of events, in which every item of daily expenditure should be daily entered. A copy of this day-book should be forwarded periodically, weekly, or monthly, to the superintendent, who would examine it, so far only as to see that the rates were fair, the labour employed not excessive, and that all other changes were reasonable. If not approved of, the superintendent would return the copy for revision to the assistant superintendent, with his remarks; when approved of, he would countersign it and forward it to the central office of accounts for compilation and audit. The extract from the day-book should be accompanied by an account current. In this account current the executive officer would be debited with all sums received, but would only take credit for bills passed. Bills rendered, but not passed, would be shown in a foot note as unadjusted; all estimates for repairs or construction should be prepared by the executive officers, carefully scrutinised, countersigned, and submitted with their remarks, by the superintendent to the Director General.

84. The accounts of the signal office would be still more simple. Each office would be allowed a standing imprest proportioned to its monthly requirements. For small offices, (25) twenty-five rupees would be sufficient. The largest would not require more than (100) one hundred rupees. This imprest may be considered as a loan to the assistant in charge, and would not appear in his accounts as a balance in hand, but merely in a foot note. His contingent bill would be forwarded to the superintendent of his Circle, who, if satisfied that the charges were just, would countersign the bill and forward it to the Director General; or if dissatisfied, return it for revision to the assistant in charge (telegraph master). These bills would be audited by a special branch of the central office of accounts, and returned as passed, signed by the Director General or his deputy.

85. The assistant in charge presenting them would receive the amount from the civil treasury. Signal office salary bills would, in like manner, be paid at the treasury on counter-signature of superintendents; and all monies received as cash collections, recoveries of fines by sale of stamps, would be paid into credit of Government,—a return of the same being also sent to the cash checking office. I would discourage advances as much as possible. They cannot be wholly dispensed with, but they may be reduced to a minimum if superintendents have the power of giving orders to the steam companies, railways, bullock trains, and post offices for transport of signallers, &c., by steamer, rail, dawk, or mail-cart, or dooly, as the route may require. The bills for such orders passed, to be passed by central office, and paid on presentation by civil treasurer. By this simple arrangement office accounts could not possibly get into confusion, even in the hands of the most bungling accountant.

Necessity for increased salaries to secure good officers.

Re-arrangement of Salaries.

86. It is hardly necessary to go into any lengthy discussion to prove the necessity for a considerable

considerable increase of salaries, if the department is to be filled with efficient officers; or to demonstrate that, without good officers, it never can work satisfactorily, or fulfil public expectation. The annual advertisement published in the English papers reads very tempting to the youth of England, ignorant of India and her ways: 180*l.* per annum, with the chance of rising to 3,600*l.* per annum, is certainly a most magnificent prospect; but from the first it became evident to those who came out that their chances of gaining any prizes were of the smallest, whilst for years to come their comparative pay would debar them from the society of people of their own rank, and would lower their status by its unfavourable contrast with that of other departments. On the last occasion of competitive examination in London, only five candidates offered themselves, and their average abilities were far below those who came first; what the next examination may bring forth it is impossible to say, but little reliance can be placed on it. In short, as observed in the despatch from the Secretary of State for India, "the results of the experiment are not encouraging." Low pay and slow promotion deter good men who know India from entering the department, and induce those who have entered to strain every nerve to get away from it. I assume, then, that increased salaries must be granted if efficiency is to be secured; and if efficiency be obtained, greatly increased traffic will soon follow, and produce handsome remunerative returns. The new tariff should produce at least 30 per cent. increase, and the traffic itself is increasing at the rate of not less than 20 per cent. per annum. The expenses are now a little over 14,00,000 rupees, and the returns over 9,00,000 rupees; it is clear, then, that the department must pay handsome revenue within a very few years if properly worked. I believe, also, that with good men well paid, and the organization I have now recommended, I shall secure a better administration, and be able to work with a smaller staff than hitherto.

87. For simplification of audit it is very desirable that the principles that regulate the salaries should be precisely the same as those which regulate other similar departments. I have, therefore, followed the plan now generally adopted with consolidated salaries, viz., of giving annual increments for those grades whose numbers are fixed, so that incumbents may not continue year after year without any improvement of their means, whilst the fluctuating, or lower grades, receive promotion for length of service.

88. For travelling allowances I recommend that precisely the same rules as those laid down in the Public Works Code be adopted for this department, excepting that when any officer on tour shall stop (8) eight hours or more of one day at one station on duty, he shall be allowed to draw his per diem allowance for that day, in addition to mileage, or be allowed the choice of *bonâ fide* expenses. When travelling from telegraph station to telegraph station by rail, an inspecting officer will travel only a very few miles, and then halt to examine the station and accounts, thus neither per diem allowance nor mileage will suffice to pay both rail fare and hotel expenses; moreover, usually when an officer of this department has to go on tour, it is not a matter of a few days' absence, he cannot afford to take his family with him, or to give up his house; but he must take servants, much luggage, and in many cases his horse and tents, involving an expenditure far beyond that covered by ordinary rates; consequently, if not conscientious, he will find some excuse for limiting his tour, and avoiding stations difficult of access. Efficient and willing inspections will never be obtained until travelling is made pecuniarily advantageous. Hitherto, in this department, this view of the subject has been quite lost sight of. Under existing rules it is both inconvenient and costly for any one to go on tour, consequently many systematically shirk, or passively resist doing so, to the very verge of absolute neglect, a course of conduct which naturally leads to insubordination, and strikes deep at the root of all discipline, zeal, and every honest feeling throughout all ranks.

Travelling allowance.

89. I do not suggest any alteration in the pay and allowances of the Director General.

90. The Deputy Director General will hold a very important, responsible, and onerous appointment. His labours and responsibilities will certainly not be inferior to those of the Deputy Adjutant General, Deputy Quarter-master General, Examiner of Commissariat Accounts, or any others of the numerous class who draw 1,000 rupees staff pay in addition to staff corps pay of rank. Deputy Director General's salary should be about the same as that of other important duties, viz., 1,500 rupees to 1,800 rupees.

91. The Deputy Director General would rarely be of less length of service than 20 years, generally over 26 years. If he received 1,000 rupees staff, his salary would be 1,640 rupees after the first period, or 1,820 rupees after the second. In recommending, then, a salary for the Deputy Director General of 1,500 rupees, rising by annual increments of 50 rupees to 1,800 rupees, I am, if anything, placing it too low. His travelling allowances should be those of a superintending engineer.

92. For superintendents I recommend (2) two grades, seven in the first, twelve in the second, including one for Ceylon. Two of the directors will be absorbed into these, and their salaries must, of course, be continued to them. In determining what shall be their salaries, it will be well to consider what denomination of officer of other departments they most closely resemble. They have not the same important duties or responsibilities as postmasters general, or superintending engineers, but they certainly approximate thereto, and must be of considerable length of service.

Superintendents in two grades.

I propose to deprive them of their house rent, excepting at the Presidency towns, and other exceptional places, and to merge these allowances into their salaries. Those employed at the Presidencies, or in important positions removed from head quarters, or on important works, would have considerable heavier responsibilities than those in less important positions.

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positions. Distinguished zeal and length of service also requires consideration; I propose, therefore, to divide them thus :—

Seven 1st class superintendents, including the superintendent for Ceylon, on 800 rupees, rising by 50 rupees per annum to 1,000 rupees. Mean rupees, 900.

Twelve 2nd class superintendents on 600 rupees, rising by 30 rupees per annum to 750 rupees. Mean rupees, 675.

Their travelling allowance should be the same as 1st class executive engineers, Department Public Works.

93. The salaries I propose for assistant superintendents, 4th class, is the same as received by covenanted civil engineers on arrival from England, viz., on joining, 200 rupees.

After one year's service, and passing an examination in the vernacular of this country, 225 rupees.

After two years approved service to be promoted to 3rd class on 250 rupees.

After three years' service, 275 rupees.

After four years', promoted into 2nd class, if conduct be satisfactory, on 300 rupees.

After five years' service, 325 rupees.

After six years' service, promoted into 1st class, 350 rupees, rising by 25 rupees annually to 450 rupees.

These periods to be prolonged or shortened in special cases of good or bad service, with the sanction of Government.

94. Travelling allowance to assistant superintendents to be the same as to assistant engineers and apprentices, Department Public Works, viz., 4 rupees per diem, or mileage 3 annas and 8 annas.

Inspectors' salaries.

95. For the new grade of inspectors, I propose somewhat lower salaries than those accorded to the upper subordinate establishment of the Public Works Department. Promoted signallers should enter on not less pay than they were in the receipt of as signallers; others entering direct would receive 80 rupees, rising to 250 rupees by increments of 10 rupees per annum. In special cases these rules might be modified under special sanction. Travelling allowances would accord with those granted to members of the upper subordinate establishment of the same salary of the Department Public Works.

96. For signallers on entering, and probationers at school, I see no call for an increase,

PRESENT SCALE.					PROPOSED SCALE.					REMARKS.
After Years of Service.	Character.				After Years of Service.	Character.				
	Superior.	Good.	Average.	Indiffer- ent.		Superior.	Good.	Average.	Indiffer- ent.	
15	150	125	100	75	15	195	162	130	100	Increments dou- bled, 6-8-10-12.
14	144	120	96	72	14	183	152	122	95	
13	138	115	92	69	13	171	142	114	89	
12	132	110	88	66	12	159	132	106	83	
11	126	105	84	63	11	147	122	98	77	Increments 50 per cent. higher.
10	120	100	80	60	10	135	112	90	71	
9	114	95	76	57	9	126	105	84	66	
8	108	90	72	54	8	117	97	78	61	
7	102	85	68	51	7	108	90	72	57	No change; Incre- ments 3-4-5-6.
6	96	80	64	48	6	99	82	66	52	
5	90	75	60	45	5	90	75	60	45	
4	84	70	56	42	4	84	70	56	42	
3	78	65	52	39	3	78	65	52	39	
2	72	60	48	36	2	72	60	48	36	
1	66	55	44	33	1	66	55	44	33	
0	60	50	40	30	0	60	50	40	30	

Signallers' salaries.

provided they may draw rations from the commissariat at the same rates as soldiers, and receive gratis their uniform, the value of which may be estimated at 3 l. per head per year; they would find their own linen, boots and shoes, &c., but Government should give them caps, trousers, waistcoats, and jackets, or coats. I also propose to keep the same increase of increments as at present for the first five years, after (5) five years to increase the increments 50 per cent., and after another five, another 50 per cent., as shown in the above table.

97. It is a well-established fact that, in all increasing scales, the average or mean is never reached. If 100 men start in life together 50 of them will not be in the same service after (10) ten years, and very few at the end of (20) twenty. Also any lottery which offers a few good prizes is always more attractive than a better one in which the prizes, though numerous, are smaller. Hence the above scale, though in reality involving little extra expense, would, I believe, be highly popular. I have already given my opinion that the rates of pay for signallers do not appear to me to call for extensive revision, but to secure honest, careful attention

attention and supervision on the part of the telegraph and deputy telegraph masters, heretofore called assistants and deputy assistants in charge, as well as to hold out prizes to the well-conducted and intelligent, I propose to make the "charge" allowances more uniform for all offices, and to make them personal rather than "charge;" that is to say, the pay of the telegraph, or deputy telegraph master, would exceed that of a signaller of his standing by his allowance. His pension and furlough pay should be calculated on it. This would confer a great benefit at a small cost. The present charge allowances vary from 75 rupees per mensem to 15 rupees, according to the amount of business transacted by each office. Instead of estimating this allowance by a kind of *ad valorem* calculation, I would divide offices into four classes, viz., presidency, and full day and night, the allowance for which should be 80 rupees per mensem. Repetition, day and night, with comparative little local work, 60 rupees. Full day work only 40 rupees. Light day work only 20 rupees. The number and classification of telegraph masters and deputy telegraph masters would vary as the offices. A first-class telegraph master or deputy, as a rule, being in a first-class office, but not necessarily so. Deputy telegraph master would receive half rates, as sanctioned in Financial Resolution, No. 1,178 of 3rd July 1865.

98. The accompanying Tabular Statement, Appendix C., conveys a fair impression of the immediate effect of the proposed alterations in the scale of pay. I assume that no promotions are to be made for length of service at the outset, but only as those fit for promotion qualify for it by length of service. The numbers in the grades will rapidly alter. When promotion throughout the department is slow, the number of first and second class assistant superintendents will be above average, and *vice versa*. This is as it should be. Financial results and conclusion.

99. I have allowed 150 rupees as office establishment for circle superintendents; this would be ample. Temporary establishments would be required for the offices of those employed on works of construction, but on a much smaller scale than hitherto, as the accounts would be so much more simple; but credit is not taken for this saving, as it is almost impossible to approximate to the amount.

100. I have also taken credit for house and horse allowance for all assistant superintendents. This is not quite correct, as several superintendents and assistant superintendents are now furnished with quarters (to the great inconvenience of the signallers and assistants in charge), and those in charge of offices do not draw horse allowance. On the whole, the increase is moderate, and is very much below what may be expected from the operation of the revised tariff, and annually increasing traffic.

101. The foregoing embraces, I trust, the whole of the organic changes that it is at present desirable to introduce into this department. From time to time other modifications will doubtless suggest themselves, but I trust few, or none of them will be radical, or of such magnitude as to require the consideration of Government for their introduction.

102. I have endeavoured to the best of my ability to devise that scheme which shall produce the best possible results, at the least possible cost, and I am sanguine that the scheme I have submitted will work well, and will approximate to this desirable end. In justice to myself I must, however, state that I have some doubt whether the abolition of directors may after all prove beneficial. I have reflected much on this question; on one side excessive centralization has weighed against loss of power and friction, but the balance has been turned by this consideration, viz., that if the change prove injudicious, nothing can be easier than to convert the seven proposed first-class superintendents into directors, an arrangement which would give one director for each local administration.

103. I shall be glad to receive early sanction to such portion of my recommendation as may meet with approval, and may add, in conclusion, that the budget provision for this department for the current year 1865-66, prepared on the recommendations for increase of salaries made in Colonel Douglas's No. 2939 of the 1st February last, is more than ample to meet all the requirements of my scheme.

(No. 4877.)

EXTRACT from the Proceedings of the Right Honourable the Governor General of India in Council, in the Home Department (Electric Telegraph), under date the 8th December 1865.

READ a letter from the Officiating Director General of Telegraphs, No. 171 A, dated the 18th October.

REMARKS.

In this letter the Director General submits for approval the measures which he considers to be necessary for making the organization of the department really effective.

2. The proposed modification of departmental establishment is shown in the Tabular Statement (Appendix C.) attached to the letter. It involves a mean increase (taking all the variable salaries at the mean between the proposed minima and maxima) of 4,49,796 rupees per annum; but for the first year the mean will not, it is shown, be fully attained; and owing to this, as well as to the full scale of proposed establishment not being in every case brought into immediate operation, the increase for the first year is estimated at only 2,83,152 rupees.

App. No. 2.

3. The alterations included in the statement under notice are as follows:—

Present Charge per Mensem.	Proposed Charge per Mensem.	
Rs. Nil.	Rs. 1,650	(1.) Appointment of a Deputy Director General on a consolidated salary of 1,500 rupees, rising by 50 rupees annually to 1,800 rupees.
2,950(mean) 6,950	Nil. 14,400	(2.) Abolition of the three Directorships.
		(3.) Increase in Number (15 to 19) and pay (from an average of about 464 rupees to one of about 758 rupees) of the superintendents.
20,900	23,980	(4.) 103 Assistant superintendents and inspectors, on an average salary of about 202 rupees, to be exchanged for 88 assistant superintendents, on an average salary of about 272 rupees.
1,000	6,000	(5.) 10 inspectors 4th class, on 100 rupees each, to be exchanged for 50 inspectors, on an average salary of 120 rupees.
39,095	66,150	(6.) 820 signallers, on an average salary of about 47 rupees, to be exchanged for 1,020 signallers and telegraph masters, on an average of about 64 rupees.
5,565	700	(7.) House allowances for superintendents and assistant superintendents to be abolished, except in respect of those stationed at Calcutta, Rangoon, and Bombay. Horse allowances of inspectors to be abolished.
3,486	2,100	(8.) Office establishments of directors to be abolished, and those of superintendents to be reduced (owing to simplification of accounts).
830	1,500	(9.) Central office of accounts to be established in lieu of former account branch.
440	739	(10.) Director General's Office Establishment to be strengthened in respect both of numbers and pay.
392	871	(11.) Office of Superintendent of Stores to be strengthened. Part of the increase (viz., 282 rupees) is due to proposed employment of cart drivers and lascars on the fixed establishment, instead of hiring them.
437	1,438	(12.) Check and Complaint Office to be strengthened and improved in respect of pay.
82,045	1,19,528	
Increase per Mensem - }	37,483	
Increase per Annum - }	4,49,796	

4. Colonel Robinson states (paragraph 103) that the Budget provision of the current year is "more than ample to meet all the requirements" of the scheme, and he shows (paragraph 86) that the increase in the receipts to be expected from the growth of traffic (20 per cent.), and from the revised tariff of charges (30 per cent.), will more than meet* the extra cost involved in the proposed reorganization.

5. The Governor General in Council proceeds to review briefly the main features of the scheme submitted by Colonel Robinson.

Deputy Director General.

6. The proposed appointment of a Deputy Director General (paragraphs 21, 22, and 91) seems to be an arrangement which is likely to prove far more efficient than the present one of three Divisional Directors whose offices are to be abolished (paragraph 3); and the salary indicated by Colonel Robinson for the Deputy Director Generalship does not seem too high to secure the services of a good officer.

Superintendents.

7. The proposition in respect of the superintendents is contained in paragraphs 28 and 92.

8. The proposed number of superintendents is reasonable, and the grading of the other officers named in paragraph 28, with the superintendents, appears also to be proper. But the Governor General in Council questions whether the salaries proposed (paragraph 92) will afford sufficient inducement, and he considers that it will be preferable to have nine only

* Present returns - - - - - Rs. 9,00,000
Add 20 per cent. for growth of traffic, and 30 per cent. for revision of Tariff, total - - - - - 4,50,000
50 per cent. - - - - -

only in the lowest class, on the salary proposed (600 to 750 rupees); six in a middle class, on the salary (800 to 1,000 rupees) proposed for the first-class; and a new first-class of four, commencing on 1,050 rupees, and rising by an increase of 75 rupees each year to 1,500 rupees. Very few will attain this maximum, and those who do must have served long and well.

9. The Governor General in Council approves generally of the powers and functions proposed for superintendents (paragraphs 4 and 23), and the Director General will be asked to furnish a copy of the instructions which he may eventually issue with the object of giving full effect to the general views expressed therein. He will further be required, if it is intended to give the superintendents any fresh powers in regard to incurring or sanctioning expenditure of any kind, to submit that part of the instructions separately for the previous sanction of Government.

Assistant Superintendents.

10. The proposed grade of assistant superintendents includes certain officers termed, until recently, inspectors. The alteration of designation was approved in this office letter, No. 2126, dated 20th September. The number (88) of assistant superintendents, as explained in paragraph 38, does not seem too large. The only item which may, perhaps, be open to question is the provision of 10 officers to meet the contingencies of absence on account of leave or on duty as acting superintendents; but the Governor General in Council would not, on the whole, object to the proposed number, for the present at least. The salaries proposed for this grade (paragraph 93) seem reasonable. The highest rate of pay (450 rupees) would be reached after 10 years' service; and if an officer's conduct has been good throughout, this does not seem too high.

11. The Governor General in Council concurs in the expediency of the principle stated in paragraph 30, in regard to the promotion of assistant superintendents.

12. In paragraph 37, it is stated that officers will be admitted to the grade of assistant superintendents after passing a suitable examination; and in the same paragraph, as also in paragraph 93, it is stated that an examination "in the vernacular" will have to be passed as a condition of the first step of promotion. The Governor General in Council thinks that something of the kind is desirable, but it occurs to him that unless assistant superintendents are to be tied to particular provinces, the proposed requirement in respect of passing in "the vernacular" may require further consideration by the Director General.

Inspectors.

13. The proposed grade of inspectors comprises the officers formerly termed overseers, as explained in paragraphs 13 and 39. The old overseer class is stated to have been of late allowed almost to die out; but Colonel Robinson regards them as a "very useful and economical class of public servants," and proposes (paragraphs 39 and 40) to continue the grade (under the designation of inspectors) recruiting it by the promotion of deserving signallers, or by the obtaining of non-commissioned officers from the Roorkee College. He proposes to limit the numbers for the present to 50. The Governor General in Council is disposed to approve of the above, and to agree to the scale of salaries proposed for the officers of this grade, as explained in paragraph 95.

Signallers and Telegraph Masters.

14. As regards signallers, the Director General proposes to introduce the distinctive designation of telegraph masters for signallers in charge of offices. There is no objection to this.

15. The Director General observes (paragraph 60) that the number of signallers must "fluctuate with the number of offices and amount of traffic;" and he calculates the present number required to be 753, besides 171 telegraph masters, or 924 in all. To this he proposes to add 10 per cent. to provide for absence on leave, &c., and for special requirements, the total number with this addition being 832, besides 188 telegraph masters, or in all 1,020. The Governor General in Council would approve of this.

16. The scale of proposed salaries for signallers is given in paragraph 96. The Governor General in Council would sanction the proposed scale. He would deem it low, but for the assistance in addition to salary which it is proposed to give. This is considerable, comprising (paragraph 96) house accommodation with furniture,* and uniform. *See also paragraph 50. The drawing of rations from the commissariat is also contemplated (paragraph 96); and even though the rations be paid for (as the Director General is believed to intend), the arrangement will be, more or less, of the nature of a privilege. It is doubtful, perhaps, whether, in all parts of the country, the arrangement in respect of rations can be made, and whether in any part of the country it will be found to work easily, involving, as it probably would, inconvenient references between the two departments; but there is no objection to the plan being tried.

17. In regard to the proposal (paragraph 49) that signallers should be relieved periodically like troops, the Governor General in Council observes that there is some truth in the reasons assigned for the measure; but, as a question of expense, the matter needs full consideration and very discreet management. His Excellency in Council will not, therefore, go further at present than to ask the Director General to submit, at his convenience, a detailed account of the manner in which he would work such a system.

App. No. 2.

18. The proposal made in paragraph 97, to modify the present system and rates of allowances to signallers in charge of offices (to be termed in future telegraph masters), meets with the entire approval of the Governor General in Council.

Training of Signallers.

19. In paragraphs 51 to 57, the Director General makes proposals with the object of providing better means of training signallers. He would establish nine training schools (paragraph 56) in different parts of the country, each school-house being supplied with proper furniture and the requisite apparatus (paragraph 53), the lads being rationed (paying for it out of their allowances) and found in uniform at the expense of Government, and the term of probation being extended from four to six months.

20. The Governor General in Council is disposed to approve generally of the above proposals. The number of schools is not regarded as excessive, but the Director General will be requested to submit details of the proposed cost.

Check Office.

21. In paragraphs 10 and 72 to 82, the Director General describes the manner in which he proposes to re-organise what has hitherto been termed the "Complaint, Fault and Cash Checker's Office," but which he would, in future, designate the "Check Office." He proposes to have an establishment "which will fluctuate with the number of messages received;" the particular scale entered in the schedule being apparently drawn out in accordance with an estimate of present requirements.

22. The plan might, unobjectionably, perhaps, be tried; the proposed scale being accepted as a present arrangement, subject to future adjustment as experience may dictate; but the matter will be more closely scrutinised in the Financial Department.

System of Accounts; Central Office of Account; Passing and Auditing of Expenditure.

23. In paragraphs 83 to 85, the Director General describes the alterations he would make in the system of accounts. Connected with this is the proposal (paragraphs 63 and 64) for the formation of a Central Office of Account, the establishment of which is entered in lump in the schedule at 1,500 rupees per mensem. With this subject may be considered also the remarks made in paragraphs 5 and 6, relative to the proposed classification of expenditure and the system under which it should be passed and audited; also the proposal contained in paragraphs 16 and 17, relative to the powers of the Director General in respect of audit.

The proposals appear generally unobjectionable, except that it might be better for all expenditure to be passed by departmental officers and subsequently audited in the Central Office. As regards the Director General's power of audit, the views expressed by Colonel Robinson appear generally sound; but it may be doubtful whether the Director General's audit should be final.

The subject will be more fully considered in the Financial Department.

24. In the latter part of paragraph 85 the Director General proposes, with the view of simplifying the accounts of the Department, and facilitating the abolition of the system of advances, that superintendents should have the "power of giving orders to the steam companies, railways, bullock trains, and post offices for transport of signallers, &c.;" the bills for such orders being passed by the Central Office and paid on presentation by the Civil Treasurer. The Governor General in Council is disposed to question the arrangement being simple. Orders for payment, whether involving eventual cash payments or transfers in account, are surely more complicated as a question of account than immediate cash payments. And on other grounds his Excellency in Council thinks it objectionable to give the power suggested. In the case of railways, private steamers and transport companies, it could only be given with the consent of the respective managers of such concerns.

Store Department.

25. In paragraphs 65 to 67, the Director General explains the modifications which he would make in the Store Department; in paragraph 68 he purposes the establishment of small local store depôts at each Presidency or Circle; and in paragraph 69 he points out the inexpediency of attempting to supply all wooden top pieces from Calcutta. The views expressed by Colonel Robinson on the above subjects are generally approved, and he will be requested to submit specific propositions showing the cost of the proposed local depôts.

Travelling Allowances.

26. In paragraphs 88, 91, 92, and 96, the Director General indicates the provision which he would make for travelling allowances to officers of the department; the rules laid down in the Public Works Code being, with certain exceptions, proposed for adoption. The views expressed by Colonel Robinson are generally approved; and he will be requested to submit a detailed plan for all grades, based on the rules and rates obtaining in the Public Works Department, and showing the specific rules which it is intended to apply to the Telegraph Department.

House and Horse Allowances.

App. No. 2.

27. The abolition of House allowances (with certain exceptions), and also of Horse allowances to the extent contemplated in paragraphs 11, 92, and 100 and in the annexed schedule is approved.

Telegraph Buildings.

28. In paragraph 58 the Director General remarks that the telegraph offices should be accommodated in buildings the property of Government, and points out the objections to renting houses. The views expressed are approved, with the reservation that, at temporary stations (in which class are included all offices that are used primarily for departmental purposes), it will be better generally to rent. The provisions of buildings will, of course, be carried out gradually, the work to be executed in any one year being regulated by the urgency of the requirements and the ability of the Public Works Department to undertake it with reference to the other demands upon its agency. The views expressed in paragraph 59 respecting the size and plan of houses seem to be unobjectionable.

Tours of Inspection by the Director General.

29. The Governor General in Council agrees to the proposal (paragraph 19) that the Director General should be allowed to make occasional extended tours of inspection.

Uniform for Officers of the Department.

30. The proposal to provide a uniform for signallers at the expense of Government has already been noticed (paragraph 15 of this Resolution); but the Director General's scheme contemplates (paragraph 14) the adoption of a uniform "for all grades;" those "below the grade of assistant superintendents" being (paragraph 55) provided at the expense of Government. The proposition is favourably regarded.

31. In conclusion the Governor General in Council observes that the Report submitted by Colonel Robinson is a good and useful one. His views appear to be generally moderate and sensible, and to give good promise of an energetic and effective management of the department, coupled with a proper and considerate treatment of all employed under him. Subject to the remarks made in the preceding paragraphs, the Governor General in Council would give a general approval to the proposed measures: and in regard to any points on which doubts have been expressed, or on which doubts may occur to the Financial Department, the Director General might be instructed to work experimentally for the present in view to the subsequent adoption of such modifications as experience may dictate.

ORDERED, that a copy of the above remarks, together with a copy of the Director General's letter, be forwarded to the Financial Department for further consideration, with reference generally to the additional expense involved in the proposals, and specially to the points noticed in paragraphs 21 and 22 (Check Office), and paragraph 23 (system of Accounts and Audit, Central Office of Account).

(True Extract.)

Under Secretary to the Government of India.

— No. 6. —

(No. 37 of 1866.)

LETTERS from *L. W. Courtenay, Esq.*, to *W. T. Thornton, Esq.*, and
Major *Champain, R.E.*

My Dear Sir,

I BEG to report that the working of the Turkish lines continues very satisfactory. Yesterday several commercial messages from Bombay and Calcutta passed through here en route for England, dated 6th instant, and then transferred to the European lines without delay. We are now working very frequently with Bagdad and Faô direct.

I remain, &c.

W. T. Thornton, Esq., &c. &c.
India Office, London.

L. Walter Courtenay.

App. No. 2.

(No. 59 of 1866.)

My Dear Sir,

Constantinople, 21 February 1866.

I BEG to report, that with the exception of an interruption of 36 hours, which took place five days ago, the Turkish lines, both east and west, continue to work very well. Last date from India, yesterday, 200 messages were received yesterday from India, direct from Bagdad.

On the 8th instant I sent a message direct to Kurrachee, the acknowledgment of which was received here three minutes afterwards.

The Persian lines are in a very bad state since the 5th December. I am informed that during the month of December they only worked five days, and during January, only seven days. Messages from Europe, sent *via* Russia and Persia to India, are forwarded by estafette over the Persian lines, thus being very greatly delayed. The interruptions, it is said, are between Hadji Kara and Teheran and Bushire. Lieutenant St. John mentions in his letter that the unexampled severity of the winter has much damaged the Persian lines, but that probably communication will be restored in a few days.

Major Champain has not yet arrived.

Believe me, &c.

L. Walter Courtenay.

W. T. Thornton, Esq., &c. &c. &c.
India Office, London.

(No. 31 of 1866.)

Indo-European Telegraph, Commissioner's Office,
Constantinople, 31 January 1866.

My Dear Sir,

WITHOUT any favour from you to reply to, I beg to confirm my letter to you of 24th instant.

Pera Office. The Administration has accepted my proposal to extend the trial to unite the two offices under Mr. O'Connor's superintendence until the 20th March.

Working of Lines, both in Europe and Asia continues good. Messages of yesterday from both sides reached here during the night.

Delays during November, between Kurrachee and Constantinople. Messages from India:—

Longest	-	-	-	-	-	-	-	10 days 8 hours.
Shortest	-	-	-	-	-	-	-	Direct from Faô.
Average	-	-	-	-	-	-	-	6 days 6 hours.

Between Constantinople and Kurrachee. Messages to India:—

Longest	-	-	-	-	-	-	-	10 days 20 hours.
Shortest	-	-	-	-	-	-	-	Direct to Faô.
Average	-	-	-	-	-	-	-	3 days.

Ottoman accounts, owing to the non-payment by the Italian and Austrian Administrations, of the amounts due by them to Turkey (upwards of 40,000 *l.*), the latter Administration has not paid us our account for the six months ending 30 June last. I have again written to the Director General about it.

I remain, &c.

L. Walter Courtenay.

Major Champain, R. E., &c. &c. &c.
India Office, London.

— No. 7. —

CORRESPONDENCE between the Chairman of the Electric and International Telegraph Company, and the Secretary of State for India, relative to the Improvement of Communication with the Continent. 1864.

THE ELECTRIC AND INTERNATIONAL TELEGRAPH COMPANY.

Telegraph-street, London, E.C.,
30 May 1864.

Sir,

I TRUST you will excuse the liberty I am taking in pressing for your decision upon the proposal contained in my letter of the 5th of November 1862, a copy of which I enclose.

Since the laying of the Persian Gulf cable, it has become incumbent upon Her Majesty's Government to take some steps for making that line practically useful.

The proposal that I had the honour to submit to you does not involve any outlay on the part of Her Majesty's Government, either in making or maintaining the line, which would be borne by the Electric Telegraph Company; it does not ask for any exclusive privilege of any kind whatsoever; but it asks that the British Government should use its influence with the Austro-Germanic Telegraph Union to obtain that which the Austrian Government

ment had, in the year 1858, undertaken to grant, namely, to reserve a direct wire across its dominions for the purpose of expediting the through messages from India to this country.

I have, &c.,
(signed) *Robert Grinston.*

App. No. 2.
—

THE ELECTRIC AND INTERNATIONAL TELEGRAPH COMPANY.

Telegraph-street, London, E.C.,
5 November 1862.

Sir,

I wish to call your attention to the subject of telegraphic communication with India.

In the event of the line down the Persian Gulf being carried out, a continuous line of telegraph will exist from this country as far as Kurrachee, the portion through Asia Minor to Bagdad having been long since completed by the Turkish Government.

But, in order to insure to this country the advantage of direct and uninterrupted communication with India, it will be necessary that some arrangement should be made to obtain a separate wire for the transmission of Indian messages across the continent of Europe.

These would otherwise be cut off and delayed by the use of the wires for the internal messages of those countries through which they would therefore have to pass. I, therefore, offer, on behalf of the Electric Telegraph Company, to reserve a wire from London to Amsterdam specially for the transmission of Indian messages, such wire to be led into any Government office to be fixed upon by the Indian Council, upon condition that the British Government obtains from the Austro-Germanic Telegraphic Union the erection of a special wire from Amsterdam to Vienna in connection with it.

I would leave it to Her Majesty's Government to decide whether the request might not be pressed for a still further extension of the wire to the borders of the Turkish Empire.

The Austro-Germanic Telegraphic Union (of which Holland is a member) would gain a considerable income from the transmission over their lines of a large portion of the telegraphic communication between Great Britain and the East, which would otherwise pass through France, if the latter, by reason of delays upon the Continent, proved to be the quicker route.

I need hardly point out the advantage to the public of an alternative route to India, and one which would be considerably cheaper than the present, but which, without the arrangement that I have pointed out to you, they would practically be debarred from.

Should Her Majesty's Government think fit to negotiate with the Austro-Germanic Union upon this matter, it would be competent to them to make provision for priority of their own, and East India Company's messages, the use of cypher, and such other stipulations as they might deem necessary.

I have, &c.
(signed) *Robert Grimston, Chairman.*

The Right Honourable Sir Charles Wood, Bart.
&c. &c. &c.

Sir,

India Office 9 June 1864.

I AM directed by the Secretary of State for India to acknowledge receipt of your letter of the 30th ultimo, suggesting that the British Government should endeavour to obtain from the Austro-Germanic Telegraphic Union, the reservation of a special wire from Amsterdam to Vienna, for the transmission of through messages between India and this country.

In reply I am directed to state that Sir Charles Wood is not as yet in a position to come to a decision on your suggestion, which, however, shall receive due attention when the arrangements in connection with the telegraph to India are more matured,

I am, &c.
(signed) *Wodehouse.*

The Honourable Robert Grimston,
&c. &c. &c.

Appendix, No. 3.

PAPERS handed in by Mr. *Randall*, 23 March 1866.

App. No. 3.

RETURN from the following INDIAN RAILWAY COMPANIES of EXPENDITURE incurred in respect of ELECTRIC TELEGRAPHS.

EAST INDIAN RAILWAY COMPANY.

ELECTRIC TELEGRAPH.

	£.	s.	d.
(A.)—Expenditure on Construction in India from the commencement to 31st December 1864 (including Inefficient or Unaudited Balances on 31st December 1864) - - - - -	157,791	1	6
Expenditure in England during the above period, viz., on Purchase of Stores, and for Freights, &c. - - - - -	70,255	17	-
TOTAL - - - - -	£. 228,046	18	6

(B.)—Statement of Receipts by sale of Unserviceable Stores - - - Nil.

(C.)—Statement showing the Cash Receipts on account of Private and Service Messages, &c., for the years 1863 and 1864, viz.:

	£.	s.	d.
Private Messages:—1863 - - - - -	3,996	5	10
1864 - - - - -	4,347	11	-
TOTAL - - - - -	£. 8,343	16	10

Service Messages:—Not charged for; if charged at public rates, it is estimated they would yield about 60,000 *l.* per annum.

(D.)—Statement showing the Expenditure of the Telegraph Department in India on account of Working and Maintenance during the years 1863 and 1864, viz.:

	£.	s.	d.
1863:—Supervision - - - - -	1,757	13	8
Working - - - - -	17,877	2	3
Maintenance - - - - -	1,882	15	8
	£. 21,517	11	7
1864:—Supervision - - - - -	2,132	4	2
Working - - - - -	20,207	18	10
Maintenance - - - - -	2,372	3	8
	£. 24,712	6	8
TOTAL - - - - -	£. 46,229	18	3

(E.)—Summary,

EAST INDIA RAILWAY COMPANY—continued.

(E.)—Summary of Statements (A.) and (D.):—

(F.)—Statement of the Number of Miles of Telegraph Lines, and Stations open in each of the years 1863 and 1864, viz.:

							Number of Miles.				Number of Offices.
1863	-	-	-	-	-	-	1,078	-	-	-	99
1864	-	-	-	-	-	-	1,105	-	-	-	111

BOMBAY, BARODA, AND CENTRAL INDIA RAILWAY COMPANY.

ELECTRIC TELEGRAPH.

										£.	s.	d.
(A.)—Expenditure on Construction in India from the commencement to 31st December 1864										-	-	-
										6,230	10	3
Expenditure in England during the same period, viz.:												
										£.	s.	d.
On purchase of Stores										-	-	-
										8,826	3	6
Estimated for Freight, &c.										-	-	-
										1,765	-	-
										10,591	3	6
TOTAL										£.	16,821	13 9

(B.)—Statement of Receipts by Sale of Unserviceable Stores:—(None).

(C.)—Statement showing the Cash Receipts on account of Private and Service Messages for the years 1863 and 1864, viz.:

Private Messages:—1863.—No return.

1864.—The total Cash Receipts for Mercantile Messages in 1864 amounted to about 2,930 l.

Service Messages:—The full details of the *pro formâ* Charges for Service Messages have not been received from India, and cannot therefore be given.

(D.)—Statement showing the Expenditure of the Telegraph Department in India, on account of Working and Maintenance during the years 1863 and 1864, viz.:

1863:—Supervision	}	-	-	-	-	-	£.	s.	d.
Working									
Maintenance									
									726 14 11
1864:—Supervision	}	-	-	-	-	-	£.	s.	d.
Working									
Maintenance									
									3,622 3 10
							£.	4,348	18 9

(N.B.—The detailed amounts have not been received from India.)

(E.)—Summary of Statements (A.) and (D.) in the Return of the Government of India:—

(F.)—Statement of the number of miles of Telegraph Lines and Stations open in each of the years 1863 and 1864.

Note.—The line was open during 1863 (from 20th January) from Bulsar to Ahmedabad, 185½ miles, and was further opened for passenger traffic in November 1864 from Bulsar to Bombay.

The line from Bombay to Ahmedabad is 306 miles in length, with 37 stations.

App. No. 3.

CALCUTTA AND SOUTH EASTERN RAILWAY COMPANY (LIMITED).

ELECTRIC TELEGRAPH.

(A.)—Expenditure on Construction in India from the commencement to 31st December 1864	£.	s.	d.
- - - - -	1,046	18	9
Expenditure in England during the above period, viz., on Purchase of Stores, and for Freights, &c.	2,547	1	5
TOTAL	£. 3,594	-	2

(B.)—Statement of Receipts by sale of Unserviceable Stores	£. 11	-	-
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(C.)—Statement showing the Cash Receipts on account of Private and Service Messages, &c. for the Years 1863 and 1864, viz.:

	£.	s.	d.
Private Messages:—1863	23	3	8
1864	43	17	4
TOTAL	£. 67	1	-

Service Messages:—No charge is made for Service Messages, and we have no record in London of the number of Messages sent.

(D.)—Statement showing the Expenditure of the Telegraph Department in India on account of Working and Maintenance during the Years 1863 and 1864, viz.:

1863:—Supervision	} (Number detailed in the London Office)	£.	s.	d.
Working		187	17	9
Maintenance		-	-	-
1864:—Supervision	} (Number detailed in the London Office)	225	-	10
Working		-	-	-
Maintenance		-	-	-
TOTAL		£. 412	18	7

(E.)—Summary of Statements (A.) and (D.) in the Return of the Government of India:—(It is not clearly understood what is here wanted).

(F.)—Statement of the Number of Miles of Telegraph Lines and Stations open in each of the Years 1863 and 1864, viz.:

	Number of Miles.	Number of Offices.
1863	28	9
1864	28	9

EASTERN BENGAL RAILWAY COMPANY.

ELECTRIC TELEGRAPH.

(A.)—Expenditure on construction in India, from the commencement to 31st December 1864	£.	s.	d.
- - - - -	2,069	7	8
Expenditure in England during the above period, viz., on Purchase of Stores, and for Freights, &c.	6,430	1	4
TOTAL	£. 8,499	9	-

(B.)—Statement

EASTERN BENGAL RAILWAY COMPANY—*continued.*

(B.)—Statement of Receipts by sale of Unserviceable Stores:—Nil.

(C.)—Statement showing the cash receipts on account of private and service Messages, &c. for the years 1863 and 1864, viz.:

								£.	s.	d.
Private Messages:—	1863	-	-	-	-	-	-	236	8	-
"	"	1864	-	-	-	-	-	367	18	9
TOTAL								£. 604	6	9

Service Messages:—No return.

(D.)—Statement showing the Expenditure of the Telegraph Department in India, on account of Working and Maintenance during the Years 1863 and 1864, viz.:

								£.	s.	d.
1863:—	Supervision	}	-	-	-	-	-	934	11	11
	Working	-}								
	Maintenance:—									No separate Return.
1864:—	Supervision	}	-	-	-	-	-	1,091	19	7
	Working	-}								
	Maintenance:—									No separate Return.
TOTAL								£. 2,026	11	6

(E.)—Summary of Statements (A.) and (D.) in the return of the Government of India:—

(F.)—Statement of the Number of Miles of Telegraph Lines and Stations open in each of the Years 1863 and 1864, viz.:

								Number of Miles.	Number of Offices.
1863	-	-	-	-	-	-	-	110	21
1864	-	-	-	-	-	-	-	110	21

GREAT SOUTHERN OF INDIA RAILWAY COMPANY.

ELECTRIC TELEGRAPH.

Expenditure on Construction in India and England, from the commencement to December 1864

£. 4,973 8 4

Receipts on Account of Messages:

								£.	s.	d.
For year ending 31st December 1863	-	-	-	-	-	-	-	247	-	9
Ditto	-	-	ditto	1864	-	-	-	251	15	-

Expenditure on Account of Working and Maintenance of Telegraph Department:

								£.	s.	d.
For Year ending 1863:—	Working	-	-	-	-	-	-	51	6	5
	Maintenance	-	-	-	-	-	-	45	17	2
								97	3	7
Ditto - 1864:—	Working	-	-	-	-	-	-	52	9	7
	Maintenance	-	-	-	-	-	-	41	19	8
								94	9	3

Number of Miles open for the Years 1863 and 1864:—
79 miles of Line working.

Stations open during the Year 1863	-	-	-	-	-	-	13
Ditto	-	ditto	1864	-	-	-	14

App. No. 3.

MADRAS RAILWAY COMPANY.

ELECTRIC TELEGRAPH.

(A.)—Expenditure on construction in India from the commencement to 31st December 1864	£.	s.	d.
Expenditure in England during the above period, viz., on purchase of Stores and for Freights, &c.	14,207	3	6
	34,016	13	8
TOTAL	£. 48,223	17	2

(B.)—Statement of Receipts by sale of unserviceable Stores; of this we have no return.

(C.)—Statement showing the Cash Receipts on account of Private Messages for the Years 1863 and 1864:	£.	s.	d.
1863	859	7	5
1864	981	1	5
TOTAL	£. 1,840	8	10

Messages on account of the Railway Service are not paid for.

(D.)—Statement showing the Expenditure of the Telegraph Department in India, on account of Working and Maintenance during the Years 1863 and 1864, viz.:

1863 Supervision and Working	£.	s.	d.
„ Maintenance	506	4	7
	729	4	4
TOTAL	£. 1,235	8	11
1864 Supervision and Working	665	19	10
„ Maintenance	1,490	8	2
TOTAL	£. 2,156	8	-

(F.)—Statement of the number of miles of Telegraph Lines and Stations open in each of the Years 1863 and 1864, viz.:

	Number of Miles.	Number of Stations.
1863	532	55
1864	570	57

SCINDE RAILWAY.

ELECTRIC TELEGRAPH.

(A.)—Expenditure on Construction in India from the commencement to 31st December 1864	£.	s.	d.
Expenditure in England during the above period, viz., on purchase of Stores and for Freights, &c.	10,843	4	10
	6,202	7	10
TOTAL	£. 17,045	12	8

(B.)—Statement of Receipts by sale of Unserviceable Stores - Nil.

(C.)—Statement showing the Cash Receipts on account of Private and Service Messages, &c., for the Years 1863 and 1864, viz:

Private Messages :—1863	£.	s.	d.
„ „ 1864	54	18	2
	337	10	4
TOTAL	£. 392	8	6

Service Messages :—No return.

(D.)—Statement

SCINDE RAILWAY—continued.

(D.)—Statement showing the Expenditure of the Telegraph Department in India on account of Working and Maintenance, during the Years 1863 and 1864:

1863 :—Supervision	}	-	-	-	-	-	£.	s.	d.	
Working							914	6	7	
Maintenance										
1864 :—Supervision	}	-	-	-	-	-	1,687	13	—	
Working										
Maintenance										
TOTAL							£.	2,601	19	7

(E.)—Summary of Statements (A. and D.) in the return of Government of India:—

(F.)—Statement of the Number of Miles of Telegraph Lines and Stations open in each of the Years 1863 and 1864, viz. :

						Number of Miles.			Number of Officers.
1863	-	-	-	-	-	114	-	-	—
1864	-	-	-	-	-	114	-	-	No return.

PUNJAB RAILWAY.

ELECTRIC TELEGRAPH.

	£.	s.	d.
(A.)—Expenditure on construction in India from the commencement to 31st December 1864 - - - - -	5,696	19	4
Expenditure in England during the above period, viz., on purchase of Stores and for Freights, &c. - - - - -	12,274	19	10
TOTAL - - - - -	£. 17,971	19	2

(B.)—Statement of Receipts by sale of Unserviceable Stores:—Nil.

(C.)—Statement showing the Cash Receipts on account of Private and Service Messages, &c., for the Years 1863 and 1864, viz.:

Private Messages :—1863	-	-	-	-	-	£.	s.	d.
						30	-	5
“ “ 1864	-	-	-	-	-	469	1	7
TOTAL	-	-	-	-	-	£.	499	2

Service Messages:—No Return.

(D.)—Statement showing the Expenditure of the Telegraph Department in India, on account of Working and Maintenance, during the Years 1863 and 1864, viz. :

1863	-	-	-	-	-	-	-	-	£.	s.	d.
1864	-	-	-	-	-	-	-	-	658	11	-
									807	13	10
TOTAL									£.	1.466	4 10

(E.)—Summary of Statements (A. and D.):—

App. No. 3.

PUNJAUB RAILWAY—continued.

(F.)—Statement of the number of Miles of Telegraph Lines and Stations open in each of the Years 1863 and 1864, viz.:

	Number of Miles.	Number of Offices.
1863 - - - - -	32 - - - - -	-
1864 - - - - -	47 - - - - -	-

N.B.—The Punjaub Railway was not opened throughout until April 1865.

FURTHER RETURN of EXPENDITURE in respect of ELECTRIC TELEGRAPHS.

GREAT INDIAN PENINSULA RAILWAY COMPANY.

ELECTRIC TELEGRAPH.

(A.)—Expenditure on Construction in India from the commencement to 31st December 1864	£.	s.	d.
	18,404	17	-
Expenditure in England during the above period, viz., on Purchase of Stores, and for Freights, &c.	48,342	16	11
TOTAL	£. 66,747	13	11

(B.)—Statement of Receipts by sale of Unserviceable Stores - - - None.

(C.)—Statement showing the Cash Receipts on account of Private and Service Messages, &c., for the years 1863 and 1864, viz.:

	£.	s.	d.
Private Messages:—1863 - - - - -	2,903	13	10
1864 - - - - -	3,760	10	10
TOTAL	£. 6,664	4	8

Service Messages - - - - - None.

(D.)—Statement showing the Expenditure of the Telegraph Department in India, on account of Working and Maintenance during the years 1863 and 1864, viz.:

	£.	s.	d.
1863:—Supervision - - - - -	5,431	3	1
Working - - - - -			
Maintenance - - - - -			
1864:—Supervision - - - - -	7,491	3	5
Working - - - - -			
Maintenance - - - - -			
TOTAL	£. 12,922	6	6

(E.)—Summary of Statements (A.) and (D.) in the Return of the Government of India:—

(F.)—Statement of the Number of Miles of Telegraph Lines and Stations open in each of the years 1863 and 1864:

	Number of Miles.	Number of Offices.
1863 - - - - -	781 $\frac{1}{2}$ - - - - -	57
1864 - - - - -	782 - - - - -	64

Appendix, No. 4.

PAPERS put in by Mr. Valpy (Board of Trade), 23 March 1866.

TOTAL VALUE of IMPORTS into the UNITED KINGDOM, and of BRITISH PRODUCE EXPORTED therefrom, and TOTAL TONNAGE of VESSELS ENTERED and CLEARED at PORTS in the UNITED KINGDOM in the Year 1865.

Value of Imports - - - - -	£. 271,134,969	Tonnage of Vessels:	Tons.
Value of Exports (British Produce and Manufactures) - - - - -	165,862,402	Entered - - - - -	14,317,886
		Cleared - - - - -	14,579,206

VALUE of IMPORTS and EXPORTS, and TONNAGE of VESSELS ENTERED and CLEARED, from and to the following Countries in the Year 1865.

C O U N T R I E S.	I M P O R T S.	E X P O R T S (British Produce and Manufactures).	T O N N A G E O F V E S S E L S.	
			Entered.	Cleared.
	£.	£.	Tons.	Tons.
British India - - - - -	37,395,372	18,254,570	664,391	671,856
Singapore and the Eastern Straits Settlements - - - - -	2,169,056	1,442,450	77,835	50,292
London - - - - -	3,707,615	685,308	52,197	50,401
Switzerland - - - - -	1,246,299	596,848	41,029	30,805
China - - - - -	10,673,960	3,609,301	91,606	80,375
China (Hong Kong) - - - - -	773,068	1,561,851	14,408	42,848
Egypt - - - - -	21,773,250	5,985,087	361,419	488,268
Dutch Possessions in India (Java, Sumatra, &c.) - - - - -	226	928,642	Nil	29,349
Philippine Islands - - - - -	1,253,904	945,624	23,207	18,055
Japan - - - - -	614,743	1,520,895	9,361	19,602
Australia - - - - -	10,283,113	13,352,357	156,649	387,239
TOTAL for the above-named Countries - - - - - } £.	68,117,356	42,897,846	1,492,102	1,869,090

BRITISH INDIA (exclusive of <i>Singapore</i> and <i>Ceylon</i> .)	
COMPUTED REAL VALUE of IMPORTS therefrom into the United Kingdom in the Year 1865.	
Principal and other Articles.	Computed Value.
	£.
Articles of Food :	
Tea - - - - -	339,847
Coffee, raw - - - - -	549,706
Rice, not rough, nor in the husk - - - - -	1,061,826
Sugar, unrefined - - - - -	411,892
„ refined - - - - -	15,511
Articles for Manufacturing Purposes :	
Cotton, raw - - - - -	24,839,092
Hemp, rough or undressed - - - - -	15,944
„ jute - - - - -	1,766,600
Hides, untanned - - - - -	598,096
Gum, lacdye - - - - -	71,706
„ shellac - - - - -	195,942
Indigo - - - - -	1,597,275
Saltpetre - - - - -	308,882
Coir, coir rope, twine, strands and yarn. - - - - -	121,821
Cutch - - - - -	41,681
Skins, goat, tanned - - - - -	182,107
Teeth, elephants' - - - - -	65,913
Oil, cocoa-nut - - - - -	130,739
Seeds, linseed - - - - -	2,250,898
„ rape - - - - -	496,759
*Silk, raw - - - - -	206,681
„ knubs or husks, and waste silk - - - - -	161,457
Wool, sheep or lambs' - - - - -	811,960
All other articles - - - - -	1,153,037
TOTAL - - - £.	37,395,372

* Exclusive of Silk Imported *via* Egypt
(see subsequent Return for Egypt).

DECLARED VALUE of British and Irish Produce and
Manufactures EXPORTED thereto from the United King-
dom in the Year 1865.

Principal and other Articles.	Declared Value.
	£.
Apparel and haberdashery - - - - -	233,609
Cotton yarn - - - - -	1,482,549
Manufactures :	
Cotton - - - - -	9,894,880
Woollen - - - - -	500,986
Hardwares and Cutlery - - - - -	299,469
Iron, wrought and unwrought - - - - -	1,961,805
Copper - - - - -	855,897
Machinery and mill-work - - - - -	590,520
Beer and ale - - - - -	550,789
All other articles - - - - -	1,884,066
TOTAL - - - £.	18,254,570

SINGAPORE AND THE EASTERN STRAITS SETTLEMENTS.	
COMPUTED REAL VALUE of IMPORTS therefrom into the United Kingdom in the Year 1865.	
Principal and other Articles.	Computed Value.
	£.
Articles of Food :	
Coffee, raw - - - - -	48,261
Rice, not rough, nor in the husk - - - - -	17,689
Sugar, unrefined - - - - -	39,356
Sago - - - - -	89,162
Tapioca - - - - -	27,509
Nutmegs - - - - -	18,818
Pepper - - - - -	257,063
Articles for Manufacturing Purposes :	
Hides, untanned - - - - -	56,146
Gambier - - - - -	310,845
Canes, rattans - - - - -	37,728
Caoutchouc - - - - -	27,317
Cutch - - - - -	11,638
Gutta Percha - - - - -	119,810
Tin - - - - -	450,107
Wood, teak - - - - -	552,539
All other articles - - - - -	105,071
TOTAL - - - £.	2,169,051

DECLARED VALUE of British and Irish Produce
Manufactures EXPORTED thereto from the United K-
dom in the Year 1865.

Principal and other Articles.	Declared Value.
	£.
Manufactures :	
Cotton - - - - -	927,941
Woollen - - - - -	31,146
Cotton yarn - - - - -	127,146
Iron, wrought and unwrought - - - - -	56,011
Copper - - - - -	51,611
Coals, cinders, and culm - - - - -	23,511
All other articles - - - - -	225,011
TOTAL - - - £.	1,442,411

CEYLON.

COMPUTED REAL VALUE of IMPORTS therefrom into the
United Kingdom in the Year 1865.

Principal and other Articles.	Computed Value.
	£.
Articles of Food :	
Coffee, raw - - - - -	3,112,765
Cinnamon - - - - -	90,003
Articles for Manufacturing Purposes :	
Cotton, raw - - - - -	161,990
Coir, coir rope, twine strands and yarn - - - - -	69,524
Lead, black (or plumbago) - - - - -	29,812
Oil, cocoa-nut - - - - -	204,879
Other articles - - - - -	38,642
TOTAL - - - £.	3,707,615

MAURITIUS.

COMPUTED REAL VALUE of IMPORTS therefrom into the
United Kingdom in the Year 1865.

Principal and other Articles.	Computed Value.
	£.
Articles of Food :	
Rice, not rough, nor in the husk - - - - -	14,288
Sugar, unrefined - - - - -	1,191,998
Spirits—rum - - - - -	21,634
Articles for Manufacturing Purposes :	
Cotton, raw - - - - -	1,052
Hides, untanned - - - - -	6,051
Wool, sheep or lambs' - - - - -	4,352
All other articles - - - - -	6,924
TOTAL - - - £.	1,246,299

DECLARED VALUE of British and Irish Produce and Manu-
factures EXPORTED thereto from the United Kingdom in
the Year 1865.

Principal and other Articles.	Declared Value.
	£.
Manufactures :	
Cotton - - - - -	387,913
Cotton yarn - - - - -	34,941
Is, cinders, and culm - - - - -	27,209
Wrought and unwrought - - - - -	43,391
Machinery and mill-work - - - - -	15,472
and ale - - - - -	24,724
Other articles - - - - -	151,658
TOTAL - - - £.	685,308

DECLARED VALUE of British and Irish Produce and Manu-
factures EXPORTED thereto from the United Kingdom in
the Year 1865.

Principal and other Articles.	Declared Value.
	£.
Manufactures :	
Cotton - - - - -	198,674
Woollen - - - - -	10,765
Apparel and haberdashery - - - - -	37,158
Hardware and cutlery - - - - -	25,030
Iron, wrought and unwrought - - - - -	68,083
Machinery and mill-work - - - - -	53,189
Copper, wrought and unwrought - - - - -	25,815
All other articles - - - - -	178,134
TOTAL - - - £.	596,848

CHINA
(exclusive of *Hong Kong*).

COMPUTED REAL VALUE of IMPORTS therefrom into the
United Kingdom in the Year 1865.

Principal and other Articles.	Computed Value.
Articles of Food :	£.
Tea - - - - -	9,247,442
Articles for Manufacturing Purposes :	
Cotton, raw - - - - -	1,061,346
* Silk „ - - - - -	163,792
Silk, knubs, husks, and waste - -	65,778
All other articles - - - - -	135,602
TOTAL - - - £.	10,673,960

* Exclusive of Silk Imported *viâ* Egypt
(see subsequent Return for Egypt).

DECLARED VALUE of British and Irish Produce and Manu-
factures EXPORTED thereto from the United Kingdom
in the Year 1865.

Principal and other Articles.	Declared Value.
Manufactures :	£.
Cotton - - - - -	1,961,940
Woollen - - - - -	1,306,758
Iron, wrought and unwrought - - -	69,101
Lead and shot - - - - -	26,571
Yarn, cotton - - - - -	22,762
All other articles - - - - -	222,169
TOTAL - - - £.	3,609,301

HONG KONG.

COMPUTED REAL VALUE of IMPORTS therefrom into the
United Kingdom in the Year 1865.

Principal and other Articles.	Computed Value.
Articles of Food :	£.
Tea - - - - -	79,094
Articles for Manufacturing Purposes :	
Cotton, raw - - - - -	532,056
* Silk „ - - - - -	8,834
Silk, knubs, husks, and waste - -	17,246
Oils, chemical, essential, &c. - -	14,778
Camphor - - - - -	25,901
Cassia lignea - - - - -	28,371
All other articles - - - - -	66,781
TOTAL - - - £.	773,061

* Exclusive of Silk Imported *viâ* Egypt
(see subsequent Return for Egypt).

DECLARED VALUE of British and Irish Produce and Ma-
factures EXPORTED thereto from the United Kingdom
the Year 1865.

Principal and other Articles.	Declared Value.
Manufactures :	£.
Cotton - - - - -	826,111
Woollen - - - - -	225,311
Copper, wrought and unwrought - -	58,911
Lead and shot - - - - -	20,811
Coals, cinders, and culm - - - -	23,011
Cotton yarn - - - - -	81,411
All other articles - - - - -	325,511
TOTAL - - - £.	1,561,111

E G Y P T.

COMPUTED REAL VALUE of IMPORTS therefrom into the United Kingdom in the Year 1865.

Principal and other Articles.	Computed Value.
	£.
Articles for Manufacturing Purposes :	
Cotton, raw - - - - -	13,906,641
Seed cotton - - - - -	828,208
Silk, raw (in transit from China, India, and Japan).	6,402,321
Musk - - - - -	12,086
Teeth, elephant - - - - -	21,307
Manufactures, silk, of India and China.	80,509
Manufactures, hair or wool, goats' -	198,763
Other Articles - - - - -	323,415
TOTAL - - - £.	21,773,250

DUTCH POSSESSIONS IN INDIA.
(Java, Sumatra, &c.)

COMPUTED REAL VALUE of IMPORTS therefrom into the United Kingdom in the Year 1865.

Principal and other Articles.	Computed Value.
	£.
Articles of Food :	
Ginger, preserved - - - - -	6
Specimens of natural science - - -	220
TOTAL - - - £.	226

DECLARED VALUE of British and Irish Produce and Manufactures EXPORTED thereto from the United Kingdom in the Year 1865.

Principal and other Articles.	Declared Value.
	£.
Manufactures :	
Cotton - - - - -	2,345,898
Silk - - - - -	316,062
Woollen - - - - -	90,331
Cotton yarn - - - - -	211,802
Apparel and haberdashery - - -	338,414
Copper, wrought and unwrought - -	237,918
Iron, wrought and unwrought - - -	531,498
Machinery and mill-work - - -	681,691
All other articles - - - - -	1,231,473
TOTAL - - - £.	5,985,087

DECLARED VALUE of British and Irish Produce and Manufactures EXPORTED thereto from the United Kingdom in the Year 1865.

Principal and other Articles.	Declared Value.
	£.
Manufactures :	
Cotton - - - - -	711,241
Woollen - - - - -	11,338
Cotton yarn - - - - -	50,096
Iron, wrought and unwrought - - -	23,585
Machinery and mill-work - - -	17,558
All other articles - - - - -	114,824
TOTAL - - - £.	928,642

PHILIPPINE ISLANDS.

COMPUTED REAL VALUE of IMPORTS therefrom into the United Kingdom in the Year 1865.

Principal and other Articles.	Computed Value.
Articles of Food, &c. :	£.
Coffee, raw - - - - -	85,197
Sugar, unrefined - - - - -	584,199
Tobacco, unmanufactured - -	123,374
„ manufactured, and cigars -	50,695
Articles for Manufacturing Purposes :	
Hemp - - - - -	309,516
Indigo - - - - -	16,173
Gum, mastic - - - - -	50,609
All other articles - - - - -	34,141
TOTAL - - - £.	1,253,904

DECLARED VALUE of British and Irish Produce and Manufactures EXPORTED thereto from the United Kingdom in the Year 1865.

Principal and other Articles.	Declared Value.
Manufactures :	£.
Cotton - - - - -	706,579
Linen - - - - -	64,080
Woollen - - - - -	24,477
Iron, wrought and unwrought - -	35,594
All other articles - - - - -	114,894
TOTAL - - - £.	945,624

J A P A N.

COMPUTED REAL VALUE of IMPORTS therefrom into the United Kingdom in the Year 1865.

Principal and other Articles.	Computed Value.
Articles of Food :	£.
Tea - - - - -	258,470
Tobacco, unmanufactured - -	32,298
Articles for manufacturing Purposes :	
Cotton, raw - - - - -	136,139
*Silk, raw - - - - -	62,590
Silk, knubs or husks, and waste silk -	46,608
Camphor - - - - -	17,403
Galls - - - - -	5,663
Tin - - - - -	11,336
Wax, bees' - - - - -	15,461
„ vegetable - - - - -	7,899
All other Articles :	
Japanned ware - - - - -	4,497
Other articles - - - - -	16,379
TOTAL - - - £.	614,743

* Exclusive of Silk Imported into Egypt.
(See previous Return for Egypt.)

DECLARED VALUE of British and Irish Produce and Manufactures EXPORTED thereto from the United Kingdom the Year 1865.

Principal and other Articles.	Declared Value.
Manufactures :	£.
Cotton - - - - -	613,679
Woollen - - - - -	658,271
Iron, wrought and unwrought - -	45,233
Lead and shot - - - - -	11,632
All other articles - - - - -	192,080
TOTAL - - - £.	1,520,895

BRITISH AUSTRALIA.

COMPUTED REAL VALUE of IMPORTS therefrom into the United Kingdom in the
Year 1865.

Principal and other Articles.	Computed Value.
Articles for Manufacturing Purposes :	£.
Cotton, raw - - - - -	24,790
Wool, sheeps' and lamb - - - - -	8,876,556
Bark for tanners and dyers' use - - - - -	49,640
Copper ore - - - - -	193,200
Copper, unwrought and part wrought - - - - -	179,519
Gum Kowrie - - - - -	83,175
Hides, untanned - - - - -	252,982
Hides, tanned - - - - -	63,348
Lead, ore of - - - - -	7,800
Oil, cocoa-nut - - - - -	51,280
Oil, sperm - - - - -	57,386
Skins, sheep, undressed - - - - -	38,888
Tallow - - - - -	247,106
Tin ore and regulus - - - - -	13,320
All other articles - - - - -	144,123
TOTAL - - - £.	10,283,113

DECLARED VALUE of British and Irish Produce and Manufactures EXPORTED thereto
from the United Kingdom in the Year 1865.

Principal and other Articles.	Declared Value.
Manufactures :	£.
Cotton - - - - -	959,907
Linen - - - - -	374,293
Woollen - - - - -	1,562,858
Iron, wrought and unwrought - - - - -	1,204,272
Machinery and mill-work - - - - -	278,757
Hardware and cutlery - - - - -	559,553
Beer and ale - - - - -	608,537
Apparel and haberdashery - - - - -	2,545,412
Earthenware and porcelain - - - - -	126,214
Leather, wrought and unwrought - - - - -	1,293,466
Paper of all sorts - - - - -	196,030
All other articles - - - - -	3,643,058
TOTAL - - - £.	13,352,357

Statistical Department, Board of Trade,
23 March 1866.

A. W. Fonblanque.

Appendix, No. 5.

App. No. 5.

PAPERS put in by Mr. *Frederick Hill*.

ESTIMATE of the Proportionate COST of Conveying the INDIAN and CHINA MAILS by PACKET, including Miscellaneous Expenses.

	£.	s.	d.
Total Gross Subsidy - - - - -	249,624	18	-
Less—For abandonment of reduced rates for Government passengers - - - - -	15,000	-	-
	234,624	18	-
Deduct—Cost of conveying Australian Mails between Southampton and Point de Galle * 30,116	£.		
For abandonment of Admiralty survey of vessels - - - - - † 4,500	£.		
	34,616	-	-
NET COST - - - - -	£.	200,008	18 -

Divided as follows :

BETWEEN	Proportionate Cost of Packets.	Less Proportion of † £. 4,500.	Net.	Estimated Proportion for India Mails.	Estimated Proportion for China Mails.
	£.	£.	£.	£.	£.
1. Southampton and } and Point de Galle -	84,888				
Marseilles - - - - -	* 30,116				
Less, Australian - - - - -					
	54,772	1,205	53,567	39,296	14,271
2. Point de Galle and Calcutta - - - - -	14,256	313	13,943	13,943	-
3. Bombay and Shanghai - - - - -	49,607	1,092	48,515	-	48,415
4. Southampton and } and Bombay - - - - -	85,874	1,890	83,984	83,984	-
Marseilles - - - - -					
£.	204,509	4,500	200,009	137,223	62,786
Miscellaneous expenses incurred in conveyance of mails - - - - -			16,790	14,420	2,370
Special packets between Dover and Calais - - - - -			580	503	77
Naval agents in charge of mails - - - - -			2,795	1,434	1,361
£.			220,174	153,580	66,594

General Post Office,
19 March 1866.Geo. Chetwynd,
Receiver and Accountant General.RETURN of the Names of the STEAM VESSELS employed in the FRENCH MAIL PACKET SERVICE to the *East Indies*, and of their Tonnage, Horse-power, and Performances.

LINES of MAIL PACKETS.	Mail Packets Employed.			Contract Time for each Line.	Average Speed.		Observations.
	Names.	Tonnage.	Horse-power.		According to Contract.	Actual for 1865.	
					<i>Knots. tenths.</i>	<i>Knots. tenths.</i>	
Marseilles and Alexandria (fitted to the India and China Line) - - -	Moeris - Peluse - Said -	not stated ditto - ditto -	400 400 400	156 hours	9 5	{ 11 0 10 5 10 9	
Suez and Point de Galle - - -	Cambodge - Donnai - Imperatrice Tigre -	1,551 1,551 1,551 not stated	500 500 500 500	373 hours	9 5	{ 9 5 9 7 9 9 10 2	
Point de Galle and Calcutta - - -	Alphée - Erymanthe Meinam -	902 902 942	400 400 280	161 hours	9 0	{ 9 7 9 0 9 4	Employed temporarily on this line.

RETURN of the VOYAGES of the FRENCH MAIL PACKETS employed in the Conveyance of the
Indian Mails during the Years 1864 and 1865.

O U T W A R D S.

Pointed Time of Departure from Marseilles.		Arrival at Alexandria.		Departure from Suez.		Arrival at Point de Galle.		Departure from Point de Galle.		Arrival at Calcutta.	
1864.		1864.		1864.		1864.		1864.		1864.	
	25 Jan. -	7 0 a.m.	27 Jan. -	11 15 p.m.	21 Feb. -	noon	22 Feb. -	8 0 a.m.	27 Feb. -	6 30 p.m.	
	25 Feb. -	8 0 p.m.	28 Feb. -	9 0 a.m.	15 Mar. -	7 0 a.m.	16 Mar. -	7 0 a.m.	22 Mar. -	3 45 p.m.	
	25 Mar. -	7 30 a.m.	27 Mar. -	4 0 p.m.	13 April -	9 0 a.m.	14 April -	7 0 a.m.	20 April -	3 0 p.m.	
	24 April -	7 0 p.m.	27 April -	4 30 p.m.	13 May -	6 30 p.m.	15 May -	6 0 a.m.	21 May -	4 0 p.m.	
	25 May -	6 0 a.m.	27 May -	3 0 a.m.	11 June -	8 30 a.m.	13 June -	6 0 a.m.	19 June -	3 0 p.m.	
	25 June -	5 0 a.m.	27 June -	11 30 a.m.	12 July -	2 0 p.m.	14 July -	6 0 a.m.	24 July -	7 0 p.m.	
	25 July -	5 45 a.m.	27 July -	11 0 a.m.	11 Aug. -	11 0 a.m.	13 Aug. -	12 30 noon	24 Aug. -	7 0 p.m.	
	25 Aug. -	8 0 a.m.	27 Aug. -	10 10 a.m.	10 Sept. -	4 0 p.m.	12 Sept. -	3 0 p.m.	18 Sept. -	3 30 p.m.	
	25 Sept. -	6 45 a.m.	27 Sept. -	9 30 a.m.	13 Oct. -	6 0 a.m.	18 Oct. -	9 0 a.m.	25 Oct. -	6 0 a.m.	
	25 Oct. -	7 30 a.m.	27 Oct. -	noon	14 Nov. -	6 30 p.m.	16 Nov. -	12 15 noon	25 Nov. -	1 30 p.m.	
	25 Nov. -	7 15 a.m.	28 Nov. -	1 30 a.m.	18 Dec. -	7 0 a.m.	18 Dec. -	11 0 a.m.	26 Dec. -	2 3 p.m.	
19th at 2 p.m.		25 Dec. -	7 0 a.m.	27 Dec. -	1 30 p.m.	14 Jan. -	noon	15 Jan. -	9 0 a.m.	22 Jan. -	10 0 a.m.
1865.		1865.		1865.		1865.		1865.		1865.	
	24 Jan. -	4 0 p.m.	27 Jan. -	3 0 a.m.	12 Feb. -	6 0 a.m.	12 Feb. -	6 0 p.m.	18 Feb. -	7 10 p.m.	
	24 Feb. -	6 0 p.m.	26 Feb. -	10 0 p.m.	14 Mar. -	6 0 a.m.	15 Mar. -	5 30 p.m.	21 Mar. -	5 0 p.m.	
	25 Mar. -	4 0 p.m.	27 Mar. -	1 0 p.m.	14 April -	6 45 a.m.	14 April -	8 30 p.m.	20 April -	3 15 p.m.	
	25 April -	10 0 a.m.	27 April -	10 0 a.m.	12 May -	6 5 a.m.	13 May -	10 40 a.m.	20 May -	12 0 a.m.	
	25 May -	5 30 a.m.	26 May -	7 0 p.m.	9 June -	7 0 p.m.	13 June -	6 0 a.m.	19 June -	6 0 p.m.	
	25 June -	6 30 a.m.	27 June -	6 0 a.m.	11 July -	2 0 p.m.	12 July -	1 0 p.m.	18 July -	5 0 p.m.	
	25 July -	7 30 a.m.	27 July -	8 0 a.m.	10 Aug. -	3 0 p.m.	11 Aug. -	6 0 p.m.	18 Aug. -	1 0 p.m.	
	25 Aug. -	7 0 a.m.	27 Aug. -	2 0 p.m.	12 Sept. -	7 0 a.m.	13 Sept. -	10 0 a.m.	18 Sept. -	5 0 p.m.	
	25 Sept. -	2 30 p.m.	27 Sept. -	6 45 p.m.	13 Oct. -	7 0 a.m.	13 Oct. -	10 0 p.m.	20 Oct. -	5 10 p.m.	
	25 Oct. -	7 0 a.m.	27 Oct. -	8 0 p.m.	14 Nov. -	7 0 a.m.	15 Nov. -	11 0 a.m.	22 Nov. -	5 0 p.m.	
	25 Nov. -	8 0 a.m.	27 Nov. -	11 30 p.m.	15 Dec. -	6 45 a.m.	15 Dec. -	5 0 p.m.	23 Dec. -	10 30 a.m.	
1866.		1866.		1866.		1866.		1866.		1866.	
	25 Dec. -	3 30 p.m.	28 Dec. -	10 45 a.m.	13 Jan. -	noon	14 Jan. -	noon	20 Jan. -	6 0 p.m.	

H O M E W A R D S.

Departure from Calcutta.	Arrival at Point de Galle.	Departure from Point de Galle.	Arrival at Suez.	Departure from Alexandria.	Arrival at Marseilles.
1864.	1864.	1864.	1864.	1864.	1864.
Hour not stated.	9 Jan. - 7 30 a.m.	9 Jan. - 4 30 p.m.	22 Jan. - 11 0 p.m.	26 Jan. - Hour not stated.	1 Feb. -
"	11 Feb. - 7 0 a.m.	11 Feb. - noon	24 Feb. - 7 30 p.m.	27 Feb. -	4 Mar. -
"	10 Mar. - 11 0 a.m.	12 Mar. - 8 0 a.m.	25 Mar. - 6 0 p.m.	27 Mar. -	2 April -
"	10 April - 3 30 p.m.	15 April - 1 0 p.m.	7 April - 1 30 p.m.	4 May -	11 May -
"	10 May - 3 0 p.m.	11 May - noon	25 May - 11 0 a.m.	27 May -	1 June -
"	10 June - 2 0 p.m.	11 June - 5 30 p.m.	27 June - 11 30 p.m.	29 June -	5 July -
"	10 July - noon	13 July - 7 0 a.m.	28 July - 10 30 p.m.	31 July -	5 Aug. -
"	10 Aug. - 3 30 p.m.	11 Aug. - 8 30 a.m.	27 Aug. - 7 30 p.m.	29 Aug. -	4 Sept. -
"	11 Sept. - 6 0 a.m.	11 Sept. - 4 0 p.m.	28 Sept. - 7 30 p.m.	30 Sept. -	6 Oct. -
4 0 a.m.	16 Oct. - 11 30 a.m.	16 Oct. - 6 0 p.m.	30 Oct. - 11 30 a.m.	1 Nov. -	6 Nov. -
4 30 a.m.	10 Nov. - 6 0 a.m.	11 Nov. - 9 0 a.m.	24 Nov. - noon	26 Nov. -	2 Dec. -
9 0 a.m.	10 Dec. - 7 0 a.m.	11 Dec. - 7 0 a.m.	23 Dec. - 11 55 p.m.	27 Dec. -	1865.
1865.	1865.	1865.	1865.	1865.	1865.
4 0 a.m.	11 Jan. - noon	16 Jan. - 6 15 p.m.	1 Jan. - 7 0 a.m.	5 Feb. - daylight	13 Feb. -
4 0 a.m.	10 Feb. - 4 0 p.m.	11 Feb. - 9 0 a.m.	25 Feb. - 7 0 a.m.	27 Feb. - 10 0 a.m.	6 Mar. -
4 0 a.m.	10 Mar. - 1 35 p.m.	16 Mar. - 1 30 p.m.	30 Mar. - 5 0 a.m.	1 April - 8 0 a.m.	7 April -
4 0 a.m.	10 April - 3 30 p.m.	11 April - 9 0 a.m.	25 April - 2 0 a.m.	27 April - daylight	2 May -
4 30 a.m.	12 May - 11 0 a.m.	14 May - 10 30 a.m.	31 May - 10 30 p.m.	2 June - 5 0 p.m.	3 June -
4 0 a.m.	11 June - 2 0 p.m.	12 June - 10 0 a.m.	28 June - 4 30 a.m.	29 June - 3 0 p.m.	5 July -
4 0 a.m.	11 July - 6 0 a.m.	11 July - noon	28 July - 4 0 p.m.	30 July - sunset	6 Aug. -
4 0 a.m.	9 Aug. - 9 0 a.m.	10 Aug. - noon	27 Aug. - 5 0 a.m.	29 Aug. - daylight	4 Sept. -
not stated	9 Sept. - 2 15 p.m.	12 Sept. - noon	30 Sept. - 5 0 p.m.	2 Oct. - not stated	8 Oct. -
"	9 Oct. - noon	11 Oct. - 10 0 a.m.	26 Oct. - 3 0 p.m.	28 Oct. - 11 0 a.m.	2 Nov. -
9 0 a.m.	10 Nov. - 9 0 a.m.	14 Nov. - 6 0 p.m.	27 Nov. - 11 30 p.m.	30 Nov. - daylight	3 Dec. -
not stated	10 Dec. - 7 0 a.m.	12 Dec. - 5 30 p.m.	25 Dec. - noon	28 Dec. -	no information.

No information as to hour of arrival.

Appendix, No. 6.

PAPERS put in by the Honourable Robert Grimston, 17 April 1866.

App. No. 6.

THE ELECTRIC AND INTERNATIONAL TELEGRAPH COMPANY,
INCORPORATED 1846.

MESSAGES received from INDIA, March 1866.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
					<i>Days. hrs. m.</i>	
Bombay	24 Feb.	4 26 p.m.	1 March	5 17 a.m.	4 12 51	Belgrade.
Calcutta	24 "	3 31 "	1 "	5 30 "	4 13 59	"
"	24 "	3 20 "	1 "	6 0 "	4 14 40	"
"	24 "	3 40 "	1 "	6 1 "	4 14 21	"
Colombo	27 "	2 35 "	1 "	9 12 "	1 18 37	"
Bombay	27 "	10 50 "	1 "	9 38 "	1 10 48	"
Calcutta	27 "	5 30 "	1 "	9 40 "	1 16 10	"
"	27 "	5 15 "	1 "	9 50 "	1 16 35	"
"	27 "	5 20 "	1 "	9 55 "	1 16 35	"
"	27 "	4 4 "	1 "	10 3 "	1 17 59	"
"	27 "	3 20 "	1 "	10 10 "	1 18 50	"
"	27 "	5 7 "	1 "	10 15 "	1 17 8	"
"	27 "	4 21 "	1 "	10 18 "	1 9 57	"
Bombay	27 "	11 10 "	1 "	10 22 "	1 23 12	"
Calcutta	27 "	10 22 "	1 "	10 38 "	2 0 18	"
Bombay	27 "	7 26 "	1 "	10 42 "	1 15 16	"
Calcutta	27 "	5 0 "	1 "	11 3 "	1 17 57	"
"	22 "	2 40 "	1 "	10 0 p.m.	7 7 20	Moldavia.
Bombay	20 "	11 40 a.m.	2 "	12 53 a.m.	9 13 13	"
Calcutta	21 "	7 0 p.m.	2 "	12 43 "	8 5 43	"
Ackyab	21 "	4 8 "	2 "	12 0 "	8 7 52	No viâ.
Calcutta	21 "	2 0 "	2 "	12 42 "	8 10 42	"
Bombay	28 "	11 0 a.m.	2 "	2 17 "	1 15 17	Belgrade.
"	28 "	1 50 p.m.	2 "	2 18 "	1 12 28	No viâ.
"	28 "	11 35 a.m.	2 "	2 22 "	1 14 47	Belgrade.
Calcutta	28 "	2 34 p.m.	2 "	2 27 "	1 23 53	"
"	28 "	2 0 "	2 "	2 33 "	1 12 33	"
"	28 "	10 20 "	2 "	2 33 "	2 4 13	"
Bombay	27 "	11 45 "	2 "	2 35 "	2 2 50	"
Calcutta	28 "	5 30 "	2 "	2 42 "	1 9 12	"
Bombay	20 "	7 40 "	2 "	2 53 "	9 7 13	No viâ.
Bangalore	20 "	5 5 "	2 "	2 56 "	9 9 51	"
Bombay	22 "	12 15 "	2 "	2 55 "	7 14 40	Moldavia.
Kurrachee	20 "	6 5 "	2 "	2 55 "	9 8 50	No viâ.
Madras	27 "	2 10 "	2 "	3 2 "	2 12 52	Belgrade.
Bombay	27 "	12 15 "	2 "	3 9 "	2 14 54	"
Calcutta	22 "	1 40 "	2 "	3 15 "	7 13 35	Moldavia.
"	22 "	4 15 "	2 "	3 20 "	8 11 5	"
"	21 "	10 40 "	2 "	3 27 "	8 4 47	No viâ.
Mirzapore	21 "	2 0 "	2 "	3 0 "	8 13 0	"
Bombay	21 "	4 30 "	2 "	3 34 "	8 11 4	Moldavia.
Calcutta	20 "	3 15 "	2 "	3 38 "	9 12 23	"
Ackyab	20 "	3 15 "	2 "	3 43 "	9 12 28	"
Colombo	20 "	4 10 "	2 "	3 40 "	9 11 30	"
Kurrachee	20 "	12 20 "	2 "	3 45 "	9 15 25	"
Calcutta	20 "	10 8 "	2 "	3 50 "	9 5 42	"
Pondichery	21 "	5 0 "	2 "	4 16 "	8 11 44	"
Colombo	21 "	11 0 a.m.	2 "	4 40 "	8 5 40	"
Calcutta	20 "	7 15 p.m.	2 "	4 6 "	9 8 51	"
"	20 "	4 10 "	2 "	4 11 "	9 12 1	"
Bombay	20 "	5 30 "	2 "	4 20 "	9 10 50	"
"	21 "	4 30 "	2 "	4 28 "	8 11 58	"
"	21 "	4 5 "	2 "	4 33 "	8 12 28	"
"	20 "	2 45 "	2 "	4 36 "	9 13 51	"
Calcutta	20 "	5 10 "	2 "	4 48 p.m.	9 11 38	"
Bombay	28 "	4 25 "	2 "	8 30 "	1 16 5	Belgrade.
"	28 "	5 28 "	2 "	8 33 "	1 15 5	"
Calcutta	28 "	4 10 "	2 "	3 47 a.m.	1 16 37	"
Bombay	28 "	4 27 "	2 "	8 58 "	1 16 31	"
Calcutta	28 "	3 56 "	2 "	9 2 "	1 17 6	"

MESSAGES from India, March 1866—continued.

App. No. C.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission,	Route.
	Date.	Hour.	Date.	Hour.		
Fao	1 March	1 5 p.m.	2 March	8 54 a.m.	Days. hrs. m.	Belgrade.
Bombay	28 Feb.	5 26 "	2 "	9 5 "	0 7 49	
Madras	28 "	5 43 "	2 "	9 8 "	1 15 39	
"	21 "	2 30 "	2 "	9 18 "	1 15 21	"
Bagdad	1 March	9 40 a.m.	2 "	9 30 "	8 18 48	Moldavia.
Calcutta	28 Feb.	3 0 p.m.	2 "	9 34 "	0 23 50	Belgrade.
Bombay	28 "	12 20 "	2 "	9 40 "	1 18 34	"
"	26 "	3 5 "	2 "	9 43 "	1 19 20	"
"	28 "	11 55 a.m.	2 "	9 48 "	3 18 38	"
"	28 "	11 56 "	2 "	9 50 "	1 21 53	"
Calcutta	28 "	1 20 p.m.	2 "	10 3 "	1 21 54	"
"	20 "	4 40 "	2 "	10 15 "	1 20 43	"
Madras	21 "	2 5 "	2 "	10 19 "	9 17 35	Moldavia.
Bombay	21 "	3 30 "	2 "	10 32 "	8 18 4	"
Calcutta	21 "	3 15 "	2 "	10 33 "	8 19 2	"
"	28 "	3 55 "	2 "	10 35 "	8 19 18	No viâ.
Cawnpore	22 "	1 24 "	2 "	4 29 p.m.	1 18 40	"
Calcutta	28 "	1 49 "	2 "	4 48 "	8 3 5	Moldavia.
Bombay	22 "	1 0 "	2 "	4 48 "	2 2 59	Belgrade.
Calcutta	22 "	10 15 "	2 "	4 56 "	8 3 48	Moldavia.
Bombay	1 March	10 0 "	2 "	5 21 "	7 18 36	"
Calcutta	21 Feb.	8 13 a.m.	2 "	5 41 "	0 19 21	No viâ.
"	No date -	1 45 p.m.	2 "	5 44 "	9 9 27	Moldavia.
"	20 Feb.	2 5 "	2 "	5 50 "	-	"
Bombay	22 "	4 10 "	2 "	6 17 "	10 3 45	"
Calcutta	20 "	1 17 "	2 "	8 15 "	8 2 7	"
Madras	21 "	2 45 "	2 "	8 15 "	10 6 58	"
Calcutta	19 "	4 40 "	2 "	8 26 "	9 5 41	"
Bombay	21 "	5 45 "	2 "	8 29 "	11 3 19	"
Madras	21 "	5 45 "	2 "	8 40 "	9 2 55	"
Calcutta	21 "	4 5 "	2 "	8 40 "	9 3 35	"
Bombay	20 "	1 15 "	2 "	10 0 "	10 8 45	"
"	28 "	5 30 "	2 "	10 17 "	2 4 47	Wallachia.
"	28 "	4 40 "	2 "	10 59 "	2 6 19	"
"	28 "	4 35 "	2 "	11 7 "	2 6 32	"
"	28 "	5 47 "	2 "	11 48 "	2 6 1	"
Calcutta	28 "	4 8 "	3 "	1 8 a.m.	2 9 0	"
Bombay	23 "	5 22 "	3 "	1 32 "	7 8 10	Moldavia.
Calcutta	No date -	11 12 "	3 "	8 26 p.m.	-	"
Bombay	23 Feb.	1 10 "	3 "	9 11 "	8 20 1	"
Calcutta	28 "	3 42 "	3 "	9 34 "	3 5 52	"
Bombay	3 March	1 45 "	3 "	9 44 "	2 7 55	"
Calcutta	1 "	11 31 a.m.	3 "	11 21 "	2 11 53	"
Bombay	2 "	2 20 p.m.	3 "	11 26 "	1 9 6	"
"	1 "	7 12 "	3 "	11 32 "	2 4 20	"
Rangoon	2 "	2 20 "	3 "	11 40 "	1 9 20	"
Calcutta	2 "	2 30 "	3 "	11 44 "	1 9 14	"
Bangalore	1 "	1 8 "	3 "	11 49 "	2 11 41	"
Bombay	28 Feb.	7 5 a.m.	4 "	10 28 a.m.	4 3 23	"
Calcutta	24 "	3 20 p.m.	4 "	10 58 "	7 19 38	"
Bombay	25 "	6 0 "	4 "	11 52 "	6 17 52	"
"	28 "	3 38 "	4 "	11 57 "	3 20 19	"
"	1 March	12 29 "	4 "	12 2 p.m.	2 23 33	"
"	28 Feb.	3 30 "	4 "	12 25 "	3 20 55	"
"	28 "	4 40 "	4 "	2 22 "	3 21 42	"
Calcutta	24 "	1 5 "	4 "	2 37 "	8 1 32	"
"	1 March	4 0 "	4 "	6 5 "	3 2 5	No viâ.
"	No date -	1 30 "	4 "	6 45 "	-	Wallachia.
Bombay	3 March	5 0 "	4 "	7 12 "	1 2 12	"
Galle	2 "	4 12 "	4 "	7 22 "	2 3 10	Belgrade.
Madras	28 Feb.	3 2 "	4 "	8 41 "	2 5 39	"
Calcutta	27 "	5 10 "	4 "	9 17 "	4 4 7	Moldavia.
Ootacamund	27 "	10 25 "	4 "	9 20 "	5 10 55	"
Calcutta	1 March	12 25 "	4 "	9 34 "	3 9 9	Belgrade.
"	2 "	4 10 "	4 "	9 40 "	2 5 30	"
"	2 "	7 34 "	4 "	10 35 "	2 3 1	Moldavia.
"	24 Feb. -	5 20 "	4 "	10 42 "	8 5 22	No viâ.
Bombay	22 "	5 23 "	4 "	10 47 "	10 5 24	Moldavia.
Calcutta	28 "	3 40 "	4 "	11 10 "	4 7 30	"
Bombay	1 March	1 30 "	4 "	11 30 "	3 10 0	"
"	1 "	3 10 "	4 "	11 35 "	3 8 25	"
"	22 Feb. -	5 56 "	4 "	11 42 "	10 5 46	"
Calcutta	2 March	2 8 "	5 "	12 0 a.m.	2 9 52	Belgrade.
"	2 "	9 18 "	5 "	12 7 "	2 2 53	"
Pondicherry	2 "	9 20 "	5 "	12 5 "	2 2 45	"
Calcutta	2 "	4 26 "	5 "	12 22 "	2 7 56	"
"	28 Feb.	3 12 "	5 "	12 19 "	4 9 7	Moldavia.
Shanghai	2 March	3 35 "	5 "	12 21 "	2 8 41	Belgrade.
Madras	28 Feb. -	3 40 "	5 "	12 34 "	4 8 54	Moldavia.
Bombay	28 "	5 5 "	5 "	12 31 "	4 7 26	Belgrade.
"	28 "	9 30 "	5 "	12 48 "	4 3 18	Moldavia.
"	28 "	5 20 "	5 "	12 51 "	4 7 31	No viâ.
"	28 "	5 50 "	5 "	12 58 "	4 7 8	Moldavia.
"	28 "	5 50 "	5 "	1 6 "	4 7 16	"
"	28 "	5 25 "	5 "	1 10 "	4 9 35	"
Calcutta	26 "	4 56 "	5 "	1 15 "	6 8 19	"
Bombay	28 "	3 51 "	5 "	1 19 "	4 7 28	"
Kurrachee	27 "	2 35 "	5 "	1 23 "	5 10 48	"
Calcutta	1 March	1 5 "	5 "	1 30 "	3 12 25	"

App. No. 6.

MESSAGES from India, March 1866—continued.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
					<i>Days. hrs. m.</i>	
Calcutta - - -	1 March	2 12 p. m.	5 March	1 40 a. m.	3 11 28	Moldavia.
Bombay - - -	2 "	7 10 "	5 "	1 43 "	2 6 33	"
Calcutta - - -	1 "	3 15 "	5 "	1 50 "	3 10 35	"
Bombay - - -	28 Feb. -	2 35 "	5 "	1 50 "	4 11 15	"
Calcutta - - -	28 "	3 30 "	5 "	1 53 "	4 10 23	"
Bombay - - -	28 "	4 40 "	5 "	1 58 "	4 9 18	"
Madras - - -	28 "	5 56 "	5 "	1 40 "	4 7 44	"
" - - -	28 "	8 45 "	5 "	1 54 "	4 5 9	"
Bombay - - -	28 "	2 30 "	5 "	1 58 "	4 11 28	"
Calcutta - - -	3 March	4 11 "	5 "	8 46 "	1 16 35	Belgrade.
Galle - - -	2 "	4 5 "	5 "	8 58 "	2 16 53	"
" - - -	2 "	4 45 "	5 "	10 5 "	2 17 20	"
Hong Kong -	2 "	4 46 "	5 "	10 12 "	2 17 28	"
Galle - - -	2 "	4 54 "	5 "	10 15 "	2 17 21	"
Calcutta - - -	2 "	4 10 "	5 "	11 17 p. m.	3 7 7	Wallachia.
Hong Kong -	2 "	4 45 "	6 "	9 25 a. m.	3 16 40	Belgrade.
Madras - - -	2 "	3 50 "	6 "	2 13 p. m.	3 22 23	"
Batavia - - -	2 "	5 30 "	6 "	1 25 "	3 19 55	"
Hong Kong -	2 "	4 15 "	6 "	1 37 "	3 21 22	"
Galle - - -	2 "	4 37 "	6 "	2 29 "	3 21 52	"
Singapore -	2 "	4 36 "	6 "	2 38 "	3 22 2	"
Galle - - -	2 "	1 0 "	6 "	8 30 a. m.	3 19 30	"
Batavia - - -	26 Feb. -	5 30 "	6 "	8 49 "	7 15 19	"
Manilla - - -	2 March	4 5 "	6 "	8 55 "	3 16 50	"
Penang - - -	2 "	4 59 "	6 "	9 0 "	3 16 1	"
Calcutta - - -	2 "	5 5 "	6 "	9 8 "	3 16 3	"
Bombay - - -	3 "	3 36 "	6 "	9 10 "	2 17 34	"
Calcutta - - -	3 "	11 19 a. m.	6 "	9 57 "	2 22 38	"
Galle - - -	2 "	3 55 p. m.	6 "	10 3 "	3 18 8	"
" - - -	2 "	5 0 "	6 "	10 37 "	3 15 37	"
Hong Kong -	2 "	4 55 "	6 "	11 7 "	3 18 12	"
" - - -	2 "	4 5 "	6 "	11 48 "	3 19 43	"
" - - -	2 "	5 0 "	6 "	1 17 p. m.	3 20 17	"
" - - -	3 "	8 30 "	6 "	4 27 "	2 19 57	"
Shanghai -	2 "	8 0 "	6 "	4 37 "	3 20 37	"
Penang - - -	2 "	6 5 "	6 "	4 25 "	3 22 20	"
Galle - - -	2 "	4 5 "	6 "	4 47 "	4 0 42	"
Colombo - - -	3 "	1 55 "	6 "	5 50 "	3 3 55	"
Calcutta - - -	3 "	3 30 "	6 "	6 0 "	3 2 30	"
" - - -	3 "	3 0 "	6 "	6 14 "	3 3 14	"
Bombay - - -	3 "	3 57 "	6 "	8 5 "	3 4 8	"
" - - -	5 "	3 30 "	6 "	8 30 "	1 5 0	"
Madras - - -	26 Feb. -	1 10 "	7 "	1 10 a. m.	6 12 0	No viâ.
Bombay - - -	1 March	1 35 "	7 "	1 26 "	5 11 51	Moldavia.
" - - -	1 "	2 25 "	7 "	1 35 "	5 11 10	"
" - - -	26 Feb. -	1 50 "	7 "	1 37 "	8 11 47	"
Colombo - - -	26 "	4 6 "	7 "	1 42 "	8 9 36	"
Bombay - - -	26 "	1 36 "	7 "	2 0 "	8 12 24	"
Rangoon - - -	26 "	5 45 "	7 "	1 40 "	8 7 55	"
Calcutta - - -	3 March	2 33 "	7 "	7 51 "	3 17 18	Belgrade.
Agra - - -	4 "	8 0 a. m.	7 "	7 56 "	2 23 56	"
Bombay - - -	5 "	1 55 p. m.	7 "	8 6 "	1 18 11	"
Calcutta - - -	3 "	2 33 "	7 "	8 52 "	3 18 19	"
Kurrachee -	5 "	5 40 "	7 "	8 56 "	1 15 16	"
" - - -	5 "	4 40 "	7 "	9 0 "	1 16 20	"
Calcutta - - -	5 "	4 20 "	7 "	9 4 "	1 15 44	"
Hong Kong -	2 "	2 45 "	7 "	9 21 "	4 18 36	No viâ.
Bombay - - -	5 "	3 35 "	7 "	9 39 "	1 18 4	Belgrade.
Colombo - - -	3 "	5 50 a. m.	7 "	9 32 "	4 3 42	"
Bombay - - -	5 "	5 40 p. m.	7 "	9 45 "	1 16 5	"
Benares - - -	4 "	12 15 "	7 "	10 27 "	2 22 12	Wallachia.
Calcutta - - -	5 "	4 0 "	7 "	10 30 "	1 18 30	Belgrade.
" - - -	3 "	6 0 "	7 "	10 54 "	3 16 54	"
Colombo - - -	3 "	12 0 "	7 "	10 56 "	3 22 56	"
Calcutta - - -	3 "	5 50 "	7 "	11 6 "	3 17 16	Wallachia.
" - - -	3 "	4 0 "	7 "	11 50 "	3 19 50	"
Kurrachee -	5 "	6 55 "	7 "	11 56 "	1 17 1	Belgrade.
Calcutta - - -	3 "	2 0 "	7 "	11 54 "	3 21 54	Wallachia.
Madras - - -	6 "	12 5 "	7 "	12 44 p. m.	1 0 39	"
Calcutta - - -	5 "	4 50 "	7 "	1 54 "	1 21 4	"
" - - -	5 "	4 10 "	7 "	2 5 "	1 *21 55	"
" - - -	3 "	5 21 "	7 "	3 35 "	3 22 14	"
Bombay - - -	5 "	4 0 "	7 "	4 48 "	2 0 48	"
Colombo - - -	5 "	3 25 "	7 "	8 36 "	2 5 11	"
Calcutta - - -	6 "	2 9 "	7 "	8 39 "	1 6 30	Belgrade.
" - - -	5 "	6 5 "	7 "	9 12 "	2 3 7	Wallachia.
Madras - - -	5 "	1 20 "	7 "	9 26 "	2 8 6	"
Calcutta - - -	5 "	1 0 "	7 "	9 34 "	2 8 34	"
Bombay - - -	5 "	4 40 "	7 "	9 41 "	2 5 1	"
" - - -	6 "	5 0 "	7 "	11 15 "	1 6 15	Belgrade.
Kurrachee -	6 "	5 24 "	7 "	11 8 "	1 5 44	"
Calcutta - - -	5 "	4 10 "	7 "	11 23 "	2 7 13	Wallachia.
Bombay - - -	6 "	12 8 "	7 "	11 44 "	1 11 36	Belgrade.
Calcutta - - -	5 "	4 20 "	7 "	11 49 "	2 7 29	Wallachia.
Bombay - - -	6 "	1 55 "	8 "	12 15 a. m.	1 10 20	Belgrade.
Calcutta - - -	6 "	12 30 "	8 "	12 18 "	1 11 48	"
" - - -	2 "	1 48 a. m.	8 "	2 25 "	6 0 37	Moldavia.
Bombay - - -	2 "	2 26 p. m.	8 "	2 27 "	5 12 1	"

MESSAGES from India, March 1866—continued.

App. No. 6.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
Colombo	26 Feb.	7 40 p.m.	8 March	2 32 a.m.	Days. hrs. m.	Moldavia.
"	27 "	5 9 "	8 "	2 38 "	9 6 52	"
Bombay	27 "	5 0 "	8 "	2 41 "	8 9 29	"
"	7 March	5 58 "	8 "	7 50 "	8 9 41	Belgrade.
"	7 "	4 0 "	8 "	7 52 "	0 13 52	"
"	7 "	3 45 "	8 "	8 4 "	0 15 52	"
Calcutta	6 "	5 30 "	8 "	8 17 "	0 16 19	"
Akyab	22 Feb.	4 35 "	8 "	8 22 "	1 14 47	"
Bombay	7 March	4 50 "	8 "	8 26 "	13 15 47	"
Calcutta	6 "	12 40 "	8 "	8 27 "	0 15 36	"
"	6 "	5 25 "	8 "	8 23 "	1 19 47	"
Bombay	6 "	2 33 "	8 "	8 46 "	1 15 3	"
Singapore	6 "	1 0 "	8 "	8 42 "	1 18 13	"
Bombay	6 "	5 50 "	8 "	8 35 "	1 19 42	"
"	6 "	4 40 "	8 "	8 40 "	1 14 45	"
Madras	6 "	6 0 "	8 "	8 55 "	1 16 0	"
Rangoon	21 Feb.	5 25 "	8 "	8 51 "	1 14 55	"
Bombay	7 March	3 0 "	8 "	8 56 "	14 15 26	"
"	7 "	2 0 "	8 "	9 0 "	0 17 56	"
"	6 "	5 5 "	8 "	9 0 "	0 19 0	"
Calcutta	7 "	12 0 "	8 "	9 8 "	1 16 55	"
Bombay	7 "	5 15 "	8 "	9 9 "	0 21 6	"
"	6 "	3 30 "	8 "	9 10 "	0 15 54	"
"	6 "	5 53 "	8 "	9 11 "	1 17 40	"
"	7 "	5 30 "	8 "	9 16 "	1 15 18	"
"	7 "	5 25 "	8 "	9 17 "	0 15 46	"
Madras	6 "	4 30 "	8 "	9 19 "	0 15 52	"
Bombay	7 "	4 58 "	8 "	9 20 "	1 15 49	"
Madras	6 "	12 0 "	8 "	9 20 "	0 16 22	"
Calcutta	7 "	3 8 "	8 "	9 23 "	1 21 20	"
Bombay	7 "	3 9 "	8 "	9 26 "	0 18 15	"
"	6 "	12 20 "	8 "	9 26 "	0 18 17	"
"	6 "	5 40 "	8 "	9 31 "	1 21 6	"
Rangoon	22 Feb.	11 58 "	8 "	9 35 "	1 16 51	"
Calcutta	6 March	10 0 "	8 "	9 40 "	13 9 37	"
"	6 "	1 0 "	8 "	9 40 "	1 11 40	"
"	6 "	1 15 "	8 "	9 46 "	1 20 40	"
"	6 "	4 28 "	8 "	9 42 "	1 20 31	"
"	6 "	2 45 "	8 "	9 52 "	1 17 14	"
"	6 "	5 48 "	8 "	9 58 "	1 19 7	"
"	6 "	5 0 "	8 "	10 2 "	1 16 10	"
"	6 "	2 58 "	8 "	10 11 "	1 17 2	"
"	26 Feb.	5 20 "	8 "	11 5 "	1 19 13	"
Kurrachee	6 March	7 50 "	8 "	11 6 "	9 17 45	Moldavia.
Bombay	26 Feb.	2 5 "	8 "	12 29 p.m.	1 15 16	No viâ.
"	26 "	1 30 "	8 "	2 38 "	9 22 24	Moldavia.
Madras	25 "	4 15 "	8 "	3 2 "	10 1 8	"
Calcutta	26 "	12 0 "	8 "	4 6 "	10 22 47	"
"	26 "	1 15 "	8 "	4 14 "	10 4 6	"
Bombay	7 March	6 37 "	8 "	5 5 "	10 2 59	"
Madras	6 "	4 0 "	8 "	5 47 "	0 22 28	Belgrade.
Calcutta	6 "	5 20 "	8 "	6 5 "	2 1 47	"
"	6 "	3 0 "	8 "	6 7 "	2 0 45	"
Madras	7 "	1 10 "	8 "	11 5 "	2 3 7	"
Calcutta	7 "	12 0 "	8 "	11 17 "	1 9 55	"
"	7 "	5 15 "	8 "	11 21 "	1 11 17	"
Kurrachee	6 "	7 25 a.m.	8 "	11 40 "	1 6 6	Wallachia.
Calcutta	7 "	6 11 p.m.	8 "	11 49 "	2 16 15	No viâ.
Akyab	22 Feb.	3 22 "	9 "	12 0 a.m.	1 5 38	Wallachia.
Calcutta	6 March	10 26 a.m.	9 "	12 3 "	14 8 38	Belgrade.
Kurrachee	6 "	5 7 p.m.	9 "	12 9 "	2 13 37	"
Calcutta	7 "	2 45 "	9 "	12 15 "	2 7 2	"
Rangoon	20 Feb.	10 30 a.m.	9 "	12 40 "	1 9 30	Wallachia.
Calcutta	7 March	12 6 p.m.	9 "	9 9 "	16 14 10	No viâ.
Rangoon	26 Feb.	2 0 "	9 "	9 48 "	1 21 3	Belgrade.
Calcutta	7 March	3 10 "	9 "	9 52 "	10 19 48	"
Rangoon	28 Feb.	6 0 "	9 "	9 55 "	1 18 42	"
Calcutta	8 March	12 20 "	9 "	10 12 "	8 15 55	"
Akyab	8 "	11 0 a.m.	9 "	12 6 p.m.	0 21 52	"
Kurrachee	8 "	3 5 p.m.	9 "	12 10 "	1 1 6	"
Calcutta	8 "	11 5 a.m.	9 "	12 20 "	0 21 5	"
Bombay	8 "	12 12 p.m.	9 "	3 32 "	1 1 15	"
Rangoon	1 "	4 30 "	9 "	8 50 "	1 3 20	"
Bombay	8 "	1 45 "	9 "	9 0 "	8 4 20	"
"	8 "	2 5 "	9 "	9 16 "	1 7 15	"
"	8 "	5 10 "	9 "	9 12 "	1 7 11	"
"	8 "	4 4 "	9 "	9 7 "	1 4 2	"
Calcutta	7 "	2 30 "	9 "	9 38 "	1 5 3	"
Rangoon	1 "	3 32 "	9 "	11 8 "	2 7 8	Wallachia.
Bombay	8 "	5 50 "	10 "	2 50 a.m.	8 7 36	Belgrade.
Calcutta	7 "	5 21 "	10 "	7 20 "	1 9 0	"
Galle	7 "	1 25 "	10 "	7 28 "	2 13 59	Wallachia.
Madras	7 "	11 11 "	10 "	7 31 "	2 18 3	"
Mangalore	7 "	1 20 "	10 "	7 24 "	2 8 20	"
Kurrachee	8 "	8 53 "	10 "	8 46 "	2 18 4	"
Madras	7 "	12 55 "	10 "	8 50 "	1 11 53	"
Calcutta	8 "	9 30 a.m.	10 "	8 53 "	2 19 55	"
Bombay	8 "	1 29 p.m.	10 "	8 59 "	1 23 23	"
"	"	"	"	"	1 19 30	"

App. No. 6.

MESSAGES from India, March. 1866—continued.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
Calcutta	8 March	11 40 p.m.	10 March	9 2 a.m.	Days. hrs. m. 1 9 22	Wallachia.
"	8 "	9 5 a.m.	10 "	9 8 "	2 0 3	"
"	7 "	5 20 p.m.	10 "	9 13 "	2 15 53	"
"	8 "	11 0 a.m.	10 "	9 27 "	1 21 27	"
Rangoon	25 Feb. -	1 22 p.m.	10 "	3 40 p.m.	13 2 18	Belgrade.
Madras	8 March	7 40 "	10 "	3 55 "	1 20 15	"
Calcutta	8 "	5 11 "	10 "	5 27 "	2 0 16	"
Bombay	8 "	8 5 "	10 "	6 4 "	1 21 59	"
Calcutta	7 "	2 25 "	10 "	9 35 "	3 7 10	"
Rangoon	1 "	4 3 "	10 "	10 0 "	9 5 57	Moldavia.
"	23 Feb. -	5 2 "	10 "	10 19 "	15 5 17	"
Calcutta	8 March	5 4 "	10 "	10 33 "	2 5 29	Belgrade.
Rangoon	28 Feb. -	1 40 "	10 "	10 33 "	10 8 53	Moldavia.
Bombay	9 March	3 50 "	10 "	10 43 "	1 7 28	Belgrade.
Rangoon	23 Feb. -	11 12 "	10 "	10 42 "	14 23 30	Moldavia.
"	28 "	1 40 "	10 "	11 7 "	10 9 27	"
Calcutta	8 March	4 20 "	10 "	10 47 "	2 6 27	Belgrade.
"	8 "	4 35 "	10 "	10 57 "	2 6 2	"
"	8 "	1 14 "	10 "	11 11 "	2 9 57	Moldavia.
"	8 "	1 44 "	10 "	11 22 "	2 9 38	"
Rangoon	28 Feb. -	3 5 "	10 "	11 25 "	10 8 20	"
Calcutta	22 "	4 0 "	10 "	11 36 "	16 7 36	"
"	8 March	4 26 "	10 "	11 40 "	2 7 20	"
Bombay	9 "	12 9 "	10 "	11 45 "	1 11 36	Belgrade.
Poona	9 "	11 39 a.m.	10 "	11 50 "	1 12 11	"
Bombay	9 "	2 5 p.m.	11 "	12 43 a.m.	1 10 38	"
"	8 "	6 0 "	11 "	12 45 "	2 6 45	Belgrade.
Calcutta	8 "	12 10 "	11 "	12 49 "	2 12 39	Nem.
Bombay	27 Feb. -	6 0 "	11 "	1 4 "	11 7 4	Moldavia.
Colombo	1 March	10 30 a.m.	11 "	1 13 "	9 14 43	"
Bombay	1 "	12 24 p.m.	11 "	1 17 "	9 12 53	"
Calcutta	2 "	12 20 "	11 "	4 15 "	8 15 55	"
Kurrachee	2 "	6 50 "	11 "	4 20 "	8 9 30	"
Bombay	1 "	5 0 "	11 "	4 31 "	9 11 31	"
"	1 "	2 0 "	11 "	4 36 "	9 14 36	"
Calcutta	26 Feb. -	1 2 "	11 "	4 41 "	12 15 39	No viâ.
"	26 "	5 35 "	11 "	4 46 "	12 11 11	"
Madras	2 March	6 2 "	11 "	4 49 "	8 10 47	Moldavia.
Calcutta	1 "	5 20 "	11 "	5 0 "	9 11 40	"
Bombay	2 "	3 40 "	11 "	5 6 "	8 13 26	"
Colombo	9 "	9 28 "	11 "	5 10 "	1 7 47	"
Hong Kong	2 "	2 3 "	11 "	4 12 "	8 14 9	"
Bombay	1 "	12 27 "	11 "	5 18 "	9 16 51	"
Calcutta	1 "	4 10 "	11 "	5 21 "	9 13 11	"
"	1 "	11 15 a.m.	11 "	5 23 "	9 18 8	"
"	2 "	2 12 "	11 "	5 38 "	9 3 26	"
Rangoon	9 "	12 50 p.m.	11 "	8 10 "	1 19 20	Belgrade.
Bombay	8 "	4 52 "	11 "	8 16 "	2 15 24	"
Calcutta	9 "	4 10 "	11 "	8 21 "	1 16 11	"
Bombay	9 "	6 8 "	11 "	8 26 "	1 14 18	"
Calcutta	11 "	10 45 a.m.	11 "	10 6 p.m.	0 11 21	Moldavia.
"	8 "	4 40 p.m.	11 "	10 29 "	3 5 49	Nem.
"	8 "	2 0 "	12 "	12 10 a.m.	3 10 10	"
"	8 "	10 40 "	12 "	12 25 "	3 1 45	"
"	8 "	5 0 "	12 "	12 17 "	3 7 17	"
"	8 "	2 50 "	12 "	12 30 "	3 9 40	Nem.
"	10 "	8 0 "	12 "	8 49 "	1 12 49	Belgrade.
"	9 "	1 59 "	12 "	10 40 "	2 20 41	"
Madras	9 "	10 0 "	12 "	10 45 "	2 12 45	"
Colombo	9 "	4 0 "	12 "	10 49 "	2 18 49	"
"	9 "	2 9 "	12 "	11 1 "	2 20 52	"
Calcutta	9 "	1 10 "	12 "	11 7 "	2 21 57	"
Colombo	No date -	12 3 "	12 "	4 54 p.m.	- - -	"
Bombay	9 March	5 0 "	12 "	4 58 "	2 23 50	"
"	9 "	5 39 "	12 "	5 3 "	2 23 24	"
"	9 "	5 30 "	12 "	5 58 "	3 0 28	"
Calcutta	9 "	12 5 "	12 "	6 6 "	3 6 1	"
"	9 "	2 0 "	12 "	6 0 "	3 4 0	"
Bombay	No date -	5 39 "	12 "	6 34 "	- - -	"
Calcutta	9 March	1 30 "	12 "	7 9 "	3 5 39	"
"	9 "	11 43 a.m.	12 "	9 45 "	3 10 2	"
Akyab	9 "	12 0 p.m.	12 "	10 20 "	3 10 20	"
Rangoon	5 "	4 25 "	13 "	11 55 "	7 7 30	Wallachia.
"	7 "	8 25 a.m.	13 "	4 41 a.m.	5 20 16	"
Bombay	10 "	4 10 p.m.	13 "	5 7 "	2 11 57	Belgrade.
Akyab	9 "	2 0 "	13 "	5 12 "	3 8 10	"
Madras	9 "	4 50 "	13 "	5 18 "	3 12 28	"
Rangoon	9 "	4 35 "	13 "	5 24 "	3 12 49	"
"	9 "	5 20 "	13 "	5 27 "	3 12 7	"
Bombay	9 "	4 24 "	13 "	5 33 "	3 13 9	"
"	9 "	5 29 "	13 "	5 35 "	3 12 6	"
"	9 "	5 5 "	13 "	8 42 "	3 15 37	"
Calcutta	9 "	2 10 "	13 "	8 45 "	3 18 35	"
Kurrachee	10 "	5 45 "	13 "	8 55 "	2 15 10	"
Calcutta	10 "	4 45 "	13 "	9 2 "	2 16 17	No viâ.
"	10 "	4 23 "	13 "	9 29 "	2 17 6	Belgrade.
Bombay	10 "	7 35 a.m.	13 "	9 35 "	3 2 0	"
Calcutta	10 "	12 6 p.m.	13 "	9 38 "	2 21 32	"

MESSAGES from India, March 1866—continued.

App. No. 6.

Station from.	Time of Departure.		Arrival in London.		Time taken	Route.
	Date.	Hour.	Date.	Hour.	in Transmission.	
					Days. hrs. m.	
Calcutta	10 March	4 34 p.m.	13 March	9 49 a.m.	2 17 15	Belgrade.
"	10 "	5 0 "	13 "	9 52 "	2 16 52	"
"	10 "	2 20 "	13 "	9 56 "	2 19 36	"
"	9 "	5 27 "	13 "	9 59 "	3 16 32	"
"	9 "	5 10 "	13 "	10 8 "	3 16 58	No viâ.
"	10 "	1 55 "	13 "	10 16 "	2 20 21	Belgrade.
"	10 "	3 49 "	13 "	11 11 "	2 19 22	"
"	No date -	1 40 "	13 "	12 15 p.m.	-	"
"	10 March	3 4 "	13 "	12 40 "	2 21 36	"
"	No date -	12 30 "	13 "	2 34 "	-	"
"	10 March	12 7 "	13 "	3 47 "	3 3 47	"
"	10 "	1 38 "	13 "	4 54 "	3 3 16	"
"	10 "	1 55 "	13 "	5 36 "	3 3 41	"
Bombay	12 "	11 27 a.m.	13 "	5 40 "	1 6 13	"
Madras	10 "	8 5 p.m.	13 "	7 5 "	2 23 0	"
Calcutta	10 "	1 4 "	13 "	9 36 "	3 8 32	"
Bangalore	10 "	12 53 "	13 "	10 38 "	3 9 45	"
Akyab	7 "	2 10 "	13 "	11 17 "	6 9 7	Wallachia.
Rangoon	8 "	4 7 "	13 "	11 31 "	5 7 24	"
Calcutta	10 "	4 30 "	13 "	11 36 "	3 7 6	Belgrade.
Akyab	7 "	6 5 "	13 "	11 38 "	6 5 33	No viâ.
"	8 "	3 8 "	13 "	11 42 "	5 8 34	"
Calcutta	12 "	10 40 "	13 "	11 45 "	1 1 5	Belgrade.
Bombay	10 "	2 35 "	14 "	12 56 a.m.	3 10 21	"
Kurrachee	12 "	1 55 "	14 "	1 0 "	1 11 5	"
Calcutta	10 "	12 30 "	14 "	1 22 "	3 12 52	"
Bombay	12 "	12 0 "	14 "	1 33 "	1 13 33	"
Calcutta	10 "	5 10 "	14 "	8 59 "	3 15 49	"
Madras	12 "	5 51 "	14 "	9 20 "	1 15 29	"
Bombay	13 "	11 30 a.m.	14 "	9 27 "	0 21 57	"
"	12 "	2 59 p.m.	14 "	9 34 "	1 18 35	Port.
Madras	12 "	4 20 "	14 "	9 32 "	1 17 7	Belgrade.
Colombo	10 "	2 15 "	14 "	9 40 "	3 19 25	"
Delhi	10 "	8 40 a.m.	14 "	9 35 "	4 0 55	"
Bombay	11 "	10 10 "	14 "	9 47 "	2 23 37	"
Calcutta	12 "	5 21 p.m.	14 "	9 50 "	1 16 29	"
"	12 "	2 30 "	14 "	9 48 "	1 19 18	"
"	12 "	3 8 "	14 "	9 52 "	1 18 44	"
Bombay	12 "	4 35 "	14 "	9 55 "	1 17 20	No viâ.
Madras	12 "	7 27 "	14 "	10 0 "	1 14 33	Wallachia.
Calcutta	12 "	5 17 a.m.	14 "	10 18 "	2 5 1	Belgrade.
"	12 "	3 50 p.m.	14 "	10 24 "	1 18 34	"
Bombay	12 "	5 15 a.m.	14 "	12 9 p.m.	2 6 54	"
Calcutta	14 "	12 26 p.m.	14 "	11 27 "	0 11 1	"
"	12 "	3 0 "	14 "	11 34 "	2 8 34	"
Bombay	12 "	7 7 "	14 "	11 57 "	2 4 50	"
"	12 "	3 10 "	15 "	8 58 a.m.	2 17 48	Wallachia.
"	12 "	5 57 "	15 "	8 54 "	2 14 57	"
Calcutta	11 "	4 0 "	15 "	8 57 "	3 16 57	"
"	12 "	3 0 "	15 "	9 12 "	2 18 12	"
"	12 "	5 21 "	15 "	10 30 p.m.	3 5 9	Belgrade.
"	12 "	5 20 "	15 "	10 35 "	3 5 15	"
Bombay	13 "	1 4 "	15 "	11 54 "	2 10 50	"
Calcutta	12 "	5 20 "	16 "	10 22 a.m.	3 17 2	"
"	12 "	5 25 "	16 "	11 17 "	3 17 52	"
"	12 "	6 10 a.m.	16 "	11 27 "	4 5 17	"
"	12 "	5 23 p.m.	16 "	11 30 "	3 18 7	"
"	12 "	6 0 "	16 "	12 58 p.m.	3 18 58	"
Akyab	9 "	10 56 "	16 "	1 6 "	6 14 10	"
Bombay	13 "	4 38 "	16 "	3 38 "	2 23 0	"
"	13 "	3 30 "	16 "	4 0 "	3 0 30	"
"	13 "	4 0 "	16 "	4 36 "	3 0 36	"
"	13 "	2 40 "	16 "	4 51 "	3 2 11	"
"	13 "	2 40 "	16 "	4 55 "	3 2 15	"
"	13 "	4 10 "	16 "	5 0 "	3 0 50	"
"	No date -	2 1 "	16 "	8 57 "	-	"
Shanghai	No date -	12 57 "	16 "	9 53 "	-	"
Singapore	12 March	5 26 "	16 "	10 0 "	4 4 34	"
Calcutta	12 "	5 20 "	17 "	1 26 a.m.	4 8 6	"
Galle	12 "	5 30 "	17 "	1 45 "	4 8 15	"
"	12 "	5 36 "	17 "	1 55 "	4 8 19	"
Hong Kong	12 "	5 8 "	17 "	2 25 "	4 9 17	"
Galle	12 "	5 0 "	17 "	2 39 "	4 9 39	"
"	12 "	5 25 "	17 "	3 0 "	4 9 35	"
"	12 "	5 20 "	17 "	8 25 "	4 15 5	"
"	12 "	5 26 "	17 "	8 24 "	4 14 58	"
Bombay	13 "	1 45 "	17 "	8 21 "	3 18 36	"
"	13 "	4 40 "	17 "	8 27 "	3 15 47	"
"	13 "	5 6 "	17 "	8 50 "	3 15 44	"
"	13 "	5 55 "	17 "	8 54 "	3 14 59	"
"	13 "	3 10 "	17 "	8 55 "	3 17 45	"
"	13 "	4 40 "	17 "	8 51 "	3 16 11	"
"	13 "	5 12 "	17 "	9 5 "	3 15 53	"
"	13 "	2 12 "	17 "	9 10 "	3 18 58	"
Galle	13 "	5 18 "	17 "	9 19 "	3 16 1	"
"	14 "	3 30 "	17 "	9 19 "	2 17 49	"
Bombay	14 "	2 5 "	17 "	9 22 "	2 19 17	"
Galle	12 "	5 33 "	17 "	9 26 "	4 15 53	"

App. No. 6.

MESSAGES from India, March 1866—continued.

Station from.	Time of Departure.		Arrival in London.		Time taken		Route.
	Date.	Hour.	Date.	Hour.	in Transmission.		
Singapore	12 March	5 20 p.m.	17 March	9 24 a.m.	4 16 4		Belgrade.
Galle	12 "	5 35 "	17 "	9 36 "	4 16 1		"
"	12 "	5 28 "	17 "	9 30 "	4 16 2		"
Bombay	13 "	3 54 "	17 "	9 40 "	3 17 46		"
"	13 "	4 3 "	17 "	9 46 "	3 17 43		"
Galle	12 "	5 30 "	17 "	9 50 "	4 16 20		"
Calcutta	No date -	No time	17 "	9 59 "	-		"
Bombay	13 March	5 27 p.m.	17 "	6 5 p.m.	4 0 33		No viâ. Belgrade.
"	13 "	8 0 "	17 "	7 0 "	3 23 0		"
"	13 "	6 3 "	17 "	8 18 "	4 2 15		"
Calcutta	13 "	4 0 "	17 "	8 20 "	4 4 20		"
Manilla	12 "	5 35 "	17 "	8 30 "	5 2 55		"
Bombay	13 "	5 28 "	17 "	8 40 "	4 3 12		"
Calcutta	13 "	4 40 "	17 "	11 6 "	4 6 26		"
Bombay	13 "	5 57 "	17 "	11 7 "	4 5 10		"
Galle	12 "	5 40 "	18 "	2 0 a.m.	5 8 20		"
Bombay	13 "	3 30 "	18 "	12 12 "	4 8 42		"
Madras	13 "	5 35 "	18 "	12 20 "	4 6 45		"
Negapatam	13 "	8 58 "	18 "	1 10 "	4 4 12		"
Calcutta	13 "	2 9 "	18 "	2 12 "	4 12 3		"
Bombay	14 "	5 50 "	18 "	2 36 p.m.	3 20 46		"
Calcutta	16 "	5 50 "	18 "	2 56 "	1 21 6		"
"	14 "	5 27 "	18 "	3 0 "	3 21 33		"
"	15 "	3 43 "	18 "	3 21 "	2 23 38		"
"	14 "	2 32 "	18 "	3 32 "	4 1 -		"
"	14 "	11 36 a.m.	18 "	3 44 "	4 4 8		"
"	14 "	5 14 p.m.	18 "	3 46 "	3 22 32		"
"	14 "	5 30 "	18 "	3 54 "	3 22 24		"
"	14 "	11 5 a.m.	18 "	3 55 "	4 4 50		"
Bombay	14 "	12 0 p.m.	18 "	4 4 "	4 4 4		"
Calcutta	14 "	11 18 a.m.	18 "	5 30 "	4 6 12		No viâ. Wallachia.
"	13 "	4 2 p.m.	18 "	5 40 "	5 1 38		"
"	13 "	5 0 "	18 "	6 45 "	5 1 45		"
"	13 "	4 40 "	18 "	6 50 "	5 2 10		"
"	13 "	2 28 "	18 "	7 24 "	5 4 56		"
Bombay	13 "	3 50 "	18 "	7 40 "	5 3 50		"
Madras	13 "	2 30 "	18 "	9 10 "	5 6 40		"
Calcutta	13 "	5 15 "	18 "	9 16 "	5 4 1		"
"	13 "	5 - 2 "	18 "	9 12 "	5 4 10		"
Bombay	13 "	5 42 "	18 "	11 18 "	5 5 31		"
Madras	13 "	2 30 "	18 "	11 27 "	5 8 57		"
Calcutta	13 "	4 15 "	18 "	11 32 "	5 7 17		"
Bombay	13 "	2 17 "	18 "	11 35 "	5 9 19		"
Galle	13 "	8 35 a.m.	19 "	12 36 a.m.	5 16 1		"
Bombay	14 "	5 56 p.m.	19 "	12 49 "	4 6 53		"
"	13 "	5 52 "	19 "	2 6 "	5 8 14		"
"	14 "	7 0 "	19 "	2 16 "	4 7 16		"
"	14 "	2 20 "	19 "	2 46 "	4 12 26		"
Calcutta	15 "	4 37 "	19 "	9 6 "	3 16 29		Belgrade.
Bombay	15 "	4 25 "	19 "	9 10 "	3 16 45		"
"	15 "	3 53 "	19 "	9 13 "	3 17 20		"
Calcutta	15 "	3 7 "	19 "	9 13 "	3 18 6		"
Bombay	15 "	3 5 "	19 "	9 16 "	3 18 11		"
"	15 "	4 40 "	19 "	9 20 "	3 16 40		"
"	15 "	4 20 "	19 "	11 9 "	3 18 49		"
Calcutta	16 "	5 8 "	19 "	1 50 p.m.	2 20 42		"
Colombo	13 "	4 0 "	19 "	6 10 "	6 2 10		"
Bombay	16 "	5 10 "	19 "	7 43 "	3 2 33		"
Madras	14 "	5 45 "	19 "	7 52 "	5 2 7		"
Hong Kong	15 "	11 30 a.m.	19 "	9 19 "	4 9 49		"
Kurrachee	No date -	5 1 p.m.	19 "	9 8 "	-		"
Akyab	15 March	8 40 a.m.	19 "	9 30 "	4 12 50		"
Bombay	15 "	2 0 p.m.	19 "	9 50 "	4 7 50		"
"	16 "	4 5 "	19 "	10 40 "	3 6 35		"
"	15 "	5 0 "	19 "	11 2 "	4 6 2		"
Rangoon	12 "	2 10 "	19 "	11 5 "	7 8 55		"
Moulmein	12 "	5 50 "	19 "	11 50 "	7 7 12		"
Bombay	16 "	3 40 "	19 "	11 55 "	3 8 15		No viâ. Belgrade.
Colombo	13 "	2 15 "	19 "	11 51 "	6 9 36		"
Galle	15 "	1 5 "	20 "	1 8 a.m.	4 12 13		"
Kurrachee	14 "	3 55 "	20 "	1 50 "	5 9 55		Wallachia.
Hong Kong	15 "	5 30 "	20 "	1 25 "	4 7 55		Belgrade.
Bombay	16 "	12 40 "	20 "	2 25 "	3 13 45		"
"	16 "	1 25 "	20 "	2 43 "	3 13 18		"
"	13 "	5 8 "	20 "	2 47 "	6 9 39		"
"	16 "	4 55 "	20 "	2 48 "	3 9 53		"
"	16 "	4 30 "	20 "	2 52 "	3 10 22		"
"	14 "	5 45 "	20 "	3 14 "	5 9 29		Wallachia.
Calcutta	16 "	4 20 "	20 "	3 16 "	3 10 56		Belgrade.
"	14 "	11 40 "	20 "	3 20 "	5 15 40		Wallachia.
Bombay	14 "	4 57 "	20 "	3 26 "	5 10 29		"
Calcutta	16 "	3 16 "	20 "	3 35 "	3 12 19		Belgrade.
Bombay	15 "	1 43 "	20 "	3 39 "	4 13 56		Wallachia.
"	14 "	1 35 "	20 "	3 50 "	5 14 15		"
Calcutta	14 "	1 15 "	20 "	3 54 "	5 14 39		"
"	14 "	4 20 "	20 "	3 56 "	5 11 36		"
Bombay	14 "	2 0 "	20 "	4 0 "	5 14 0		"
"	14 "	1 35 "	20 "	8 57 "	5 19 22		"

MESSAGES from India, March 1866—continued.

App. No. 6.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
					<i>Days. hrs. min.</i>	
Calcutta - - -	15 March	12 7 p.m.	20 March	8 59 a.m.	4 20 52	Wallachia.
Bombay - - -	15 "	3 25 "	20 "	8 54 "	4 17 29	"
Calcutta - - -	14 "	5 20 "	20 "	9 2 "	5 15 42	"
Bombay - - -	14 "	4 54 "	20 "	9 9 "	5 16 15	"
" - - -	14 "	1 35 "	20 "	9 17 "	5 20 42	"
" - - -	14 "	12 10 "	20 "	9 20 "	5 21 10	"
Calcutta - - -	14 "	5 20 "	20 "	11 10 "	5 17 50	"
" - - -	14 "	10 32 "	20 "	11 10 "	5 12 38	"
Bombay - - -	14 "	12 10 "	20 "	11 15 "	5 23 5	"
Calcutta - - -	14 "	4 52 "	20 "	11 19 "	5 18 27	"
Bombay - - -	14 "	4 45 "	20 "	12 3 p.m.	5 19 18	"
Galle - - -	14 "	3 35 "	20 "	7 8 "	6 3 33	Belgrade.
" - - -	14 "	4 35 "	20 "	7 7 "	6 2 32	"
Calcutta - - -	19 "	2 46 "	20 "	7 24 "	1 4 38	"
Singapore - -	15 "	10 50 a.m.	20 "	7 30 "	5 8 40	"
Hong Kong - -	15 "	11 1 "	20 "	9 7 "	5 10 6	"
Galle - - -	14 "	5 5 p.m.	20 "	9 43 "	6 4 43	"
Calcutta - - -	15 "	5 0 "	20 "	9 46 "	5 9 46	Wallachia.
Bombay - - -	14 "	5 56 "	20 "	10 6 "	6 4 10	"
Hong Kong - -	15 "	11 10 a.m.	20 "	10 13 "	5 11 3	"
Calcutta - - -	15 "	9 36 p.m.	20 "	10 15 "	5 0 39	"
Bombay - - -	14 "	11 30 "	20 "	10 20 "	5 22 50	"
Calcutta - - -	15 "	4 20 "	20 "	10 30 "	5 6 10	No vid.
" - - -	14 "	11 45 a.m.	20 "	10 35 "	6 10 50	Wallachia.
" - - -	15 "	5 40 p.m.	20 "	11 46 "	5 6 6	"
" - - -	15 "	9 55 a.m.	21 "	12 8 a.m.	5 14 13	"
" - - -	15 "	2 52 p.m.	21 "	12 10 "	5 9 18	"
Bombay - - -	15 "	11 15 "	21 "	12 15 "	5 1 0	"
Kurrachee - -	15 "	2 15 "	21 "	12 20 "	5 10 5	"
Bombay - - -	14 "	5 40 "	21 "	12 33 "	6 6 53	"
" - - -	15 "	12 11 "	21 "	1 12 "	5 13 1	"
" - - -	15 "	3 53 "	21 "	12 52 "	5 8 59	"
Galle - - -	14 "	5 38 "	21 "	1 12 "	6 7 34	Belgrade.
Melbourne - -	16 "	4 6 "	21 "	1 27 "	4 9 21	"
Singapore - -	15 "	11 15 "	21 "	1 17 "	5 14 2	"
Bombay - - -	15 "	1 55 "	21 "	2 5 "	5 12 10	No vid.
Calcutta - - -	16 "	11 45 "	21 "	2 9 "	4 2 24	"
" - - -	15 "	4 25 "	21 "	1 51 "	1 9 26	"
Bombay - - -	16 "	5 28 "	21 "	2 25 "	4 8 57	"
Galle - - -	14 "	5 36 "	21 "	2 34 "	6 8 58	Belgrade.
Hong Kong - -	15 "	6 11 "	21 "	2 37 "	5 8 26	"
Calcutta - - -	16 "	4 20 "	21 "	2 40 "	4 10 20	"
Galle - - -	14 "	5 48 "	21 "	2 12 "	6 8 24	"
Melbourne - -	12 "	5 36 "	21 "	2 52 "	8 9 16	"
Galle - - -	14 "	5 56 "	21 "	3 28 "	6 9 32	"
Calcutta - - -	17 "	2 45 "	21 "	3 5 "	3 12 20	"
Galle - - -	14 "	3 6 "	21 "	3 20 "	6 12 14	"
Calcutta - - -	15 "	5 30 "	21 "	3 46 "	5 10 16	"
Galle - - -	15 "	10 5 "	21 "	8 30 "	5 22 25	"
Bombay - - -	15 "	2 20 "	21 "	9 47 "	5 19 27	Wallachia.
" - - -	15 "	4 28 "	21 "	9 51 "	5 17 23	"
" - - -	15 "	3 20 "	21 "	10 14 "	5 18 54	"
Hong Kong - -	15 "	11 50 a.m.	21 "	11 34 a.m.	5 23 44	Belgrade.
Galle - - -	15 "	11 20 p.m.	21 "	12 19 p.m.	5 12 59	"
" - - -	14 "	5 48 p.m.	21 "	6 0 "	7 0 12	"
" - - -	No date -	7 5 "	21 "	6 40 "	-	"
Singapore - -	15 March	12 0 "	21 "	6 36 "	6 6 36	"
Hong Kong - -	15 "	11 3 a.m.	21 "	10 45 "	6 11 42	"
Galle - - -	14 "	5 57 p.m.	21 "	11 50 "	7 5 53	"
" - - -	15 "	11 5 a.m.	22 "	12 0 a.m.	6 12 55	"
Bombay - - -	15 "	7 10 p.m.	22 "	12 5 "	6 4 55	"
Hong Kong - -	15 "	11 11 a.m.	22 "	12 9 "	6 12 58	"
" - - -	15 "	11 50 "	22 "	12 13 "	6 12 23	"
Calcutta - - -	16 "	11 0 p.m.	22 "	12 16 "	5 1 16	"
" - - -	17 "	4 20 "	22 "	12 19 "	4 7 59	"
Bombay - - -	17 "	7 49 "	22 "	1 52 "	4 6 3	"
Calcutta - - -	17 "	2 14 "	22 "	1 56 "	4 11 32	"
" - - -	17 "	2 20 "	22 "	2 0 "	4 11 40	"
Bombay - - -	17 "	12 5 "	22 "	2 4 "	4 13 59	"
Galle - - -	17 "	7 0 a.m.	22 "	2 6 "	4 19 6	"
Calcutta - - -	17 "	2 12 p.m.	22 "	2 12 "	4 12 0	"
Bombay - - -	17 "	1 6 "	22 "	2 35 "	4 13 29	"
" - - -	17 "	3 40 "	22 "	2 40 "	4 11 0	"
" - - -	17 "	1 10 "	22 "	2 48 "	4 13 38	"
" - - -	17 "	1 30 "	22 "	2 54 "	4 13 24	"
Calcutta - - -	17 "	1 30 "	22 "	2 59 "	4 13 29	"
" - - -	17 "	4 2 "	22 "	3 35 "	4 11 33	"
Galle - - -	15 "	7 45 "	22 "	8 42 p.m.	7 0 57	"
Rangoon - - -	14 "	5 20 "	22 "	10 4 "	8 4 44	"
Hong Kong - -	15 "	11 58 a.m.	23 "	12 0 a.m.	7 12 2	"
Calcutta - - -	17 "	4 7 p.m.	23 "	12 13 "	5 8 6	"
Galle - - -	15 "	1 35 "	23 "	12 52 "	7 11 17	"
Akyab - - -	14 "	10 50 a.m.	23 "	1 34 "	8 14 44	"
Bombay - - -	17 "	4 27 p.m.	23 "	8 27 "	5 16 0	"
" - - -	17 "	4 6 "	23 "	8 35 "	5 16 29	"
" - - -	17 "	7 40 "	23 "	8 37 "	5 12 57	"
" - - -	16 "	7 20 "	23 "	8 48 "	6 13 28	"
Madras - - -	17 "	3 30 "	23 "	8 48 "	5 17 18	"

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MESSAGES from India, March 1866—continued.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
					<i>Days. hrs. min.</i>	
Colombo	16 March	3 20 p.m.	23 March	8 55 a.m.	6 17 35	Belgrade.
Bombay	16 "	5 0 "	23 "	9 32 "	6 16 32	"
Calcutta	16 "	4 40 "	23 "	9 46 "	6 17 6	"
Bombay	19 "	4 4 "	23 "	9 50 "	3 17 46	"
Calcutta	16 "	5 20 "	23 "	10 5 "	6 16 45	"
"	16 "	4 0 "	23 "	10 32 "	6 18 32	"
"	15 "	4 30 "	23 "	10 35 "	7 18 5	"
"	16 "	6 5 "	23 "	10 40 "	6 16 35	"
Madras -	17 "	3 15 "	23 "	11 8 "	5 19 53	"
Akyab -	15 "	8 2 a.m.	23 "	2 50 p.m.	8 6 48	"
Rangoon	No date	10 35 "	23 "	3 2 "	-	"
Bombay	22 March	3 36 p.m.	23 "	10 40 "	1 7 4	"
Rangoon	17 "	2 15 "	23 "	11 9 "	6 8 54	"
Madras	17 "	4 0 "	23 "	11 12 "	6 7 12	"
"	17 "	4 15 "	23 "	11 25 "	6 7 10	"
Rangoon	17 "	10 3 "	23 "	11 34 "	6 1 31	"
Bombay	17 "	4 55 "	23 "	11 42 "	6 6 47	"
Calcutta	17 "	4 30 "	23 "	11 58 "	6 7 28	"
"	17 "	5 11 "	24 "	12 20 a.m.	6 7 9	"
"	17 "	4 24 "	24 "	12 4 "	6 7 40	"
Bombay	17 "	5 55 "	24 "	12 25 "	6 6 30	"
Madras	20 "	4 15 "	24 "	1 38 "	3 9 23	"
Bombay	19 "	5 0 "	24 "	2 0 "	4 9 0	"
Colombo	17 "	12 2 "	24 "	2 7 "	6 14 5	"
Rangoon	13 "	1 15 "	24 "	2 20 "	10 13 5	"
Calcutta	19 "	4 24 "	24 "	2 7 "	4 9 43	"
Bombay	19 "	4 30 "	24 "	2 10 "	4 9 40	"
Calcutta	19 "	10 45 "	24 "	2 23 "	4 3 38	"
Akyab -	16 "	3 17 "	24 "	2 25 "	7 11 18	"
Calcutta	16 "	5 25 "	24 "	2 45 "	7 9 20	"
Bombay	18 "	10 10 a.m.	24 "	2 51 "	5 16 41	"
"	19 "	5 20 p.m.	24 "	8 11 "	4 14 51	"
"	19 "	4 24 "	24 "	8 18 "	4 15 54	"
Kurrachee	19 "	6 27 "	24 "	8 24 "	4 13 57	"
Calcutta	19 "	7 0 "	24 "	8 26 "	4 13 26	"
Bombay	No date	2 6 "	24 "	8 31 "	-	"
"	19 March	12 6 "	24 "	8 34 "	4 20 28	"
"	19 "	3 23 "	24 "	8 46 "	4 17 23	"
Calcutta	19 "	12 4 "	24 "	8 40 "	4 20 36	"
"	19 "	1 46 "	24 "	8 43 "	4 18 57	"
Bombay	19 "	2 16 "	24 "	8 50 "	4 18 34	"
Calcutta	19 "	11 20 a.m.	24 "	9 5 "	4 21 45	"
Bombay	19 "	5 22 p.m.	24 "	9 8 "	4 15 46	"
"	19 "	4 58 "	24 "	9 10 "	4 16 12	"
"	19 "	4 50 "	24 "	9 14 "	4 16 24	"
Calcutta	20 "	4 0 "	24 "	9 16 "	3 17 16	"
"	20 "	1 12 "	24 "	9 20 "	3 20 8	"
Bombay	24 "	5 29 a.m.	24 "	9 35 "	0 4 6	"
Kurrachee	19 "	6 25 p.m.	24 "	9 40 "	4 15 15	"
Calcutta	19 "	5 7 "	24 "	9 50 "	4 16 43	"
"	20 "	3 55 "	24 "	10 0 "	3 18 5	"
"	20 "	4 19 "	24 "	10 16 "	3 17 57	"
Bombay	20 "	5 57 "	24 "	10 20 "	3 16 23	"
Colombo	20 "	4 40 "	24 "	10 25 "	3 17 45	"
Calcutta	20 "	4 40 "	24 "	10 46 "	3 18 6	"
"	19 "	4 26 "	24 "	10 50 "	4 18 24	"
Bombay	19 "	4 49 "	24 "	10 48 "	4 17 59	No viâ. Belgrade.
"	20 "	2 10 "	24 "	10 50 "	3 20 40	"
"	19 "	5 52 "	24 "	10 53 "	4 17 1	"
Rangoon	19 "	2 7 "	24 "	10 54 "	4 20 47	"
Galle -	19 "	11 5 "	24 "	11 8 "	4 12 3	"
Calcutta	23 "	11 30 a.m.	24 "	11 46 "	1 0 16	"
Bombay	20 "	10 50 p.m.	24 "	1 5 p.m.	3 14 15	"
Calcutta	20 "	2 20 "	24 "	1 55 "	3 23 35	"
Colombo	19 "	1 56 "	24 "	2 0 "	5 0 4	"
Calcutta	20 "	2 21 "	24 "	2 4 "	3 22 43	"
Colombo	20 "	10 0 "	24 "	2 20 "	3 16 20	"
Calcutta	20 "	5 45 "	24 "	2 16 "	3 20 31	"
"	20 "	4 18 "	24 "	3 29 "	3 23 11	"
"	20 "	5 8 "	24 "	3 34 "	3 22 26	"
Bombay	20 "	4 22 "	24 "	3 36 "	3 23 14	"
Madras -	18 "	5 0 "	24 "	5 2 "	6 0 2	"
Rangoon	16 "	2 55 "	24 "	6 54 "	8 3 59	"
Colombo	19 "	4 40 "	24 "	7 10 "	5 2 30	"
Bombay	20 "	10 45 a.m.	24 "	7 18 "	4 8 33	"
Madras	20 "	6 0 p.m.	24 "	7 58 "	4 1 58	"
Calcutta	20 "	3 20 "	24 "	8 30 "	4 5 10	"
Rangoon	17 "	3 15 "	24 "	10 15 "	7 7 0	"
Cochin -	19 "	4 56 "	25 "	12 20 a.m.	5 7 24	Wallachia.
Calcutta	19 "	5 0 "	25 "	12 58 "	5 7 58	"
Madras	19 "	4 10 "	25 "	12 4 "	5 7 54	"
Colombo	19 "	4 5 "	25 "	1 3 "	5 8 58	"
Calcutta	20 "	11 40 a.m.	25 "	1 15 "	4 13 35	"
"	20 "	1 0 p.m.	25 "	1 10 "	4 12 10	"
Bombay	20 "	4 5 "	25 "	1 18 "	4 9 13	"
Madras	19 "	7 55 "	25 "	9 25 "	5 13 30	"
Bombay	20 "	5 50 "	25 "	2 55 p.m.	4 21 5	"
Calcutta	20 "	4 0 "	25 "	3 12 "	4 23 12	Belgrade.

MESSAGES from *India*, March 1866—*continued*.

App. No. 6.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
					<i>Days. hrs. min.</i>	
Bombay	20 March	11 8 p.m.	25 March	3 15 p.m.	4 16 7	Belgrade.
"	20 "	12 1 "	25 "	3 20 "	5 3 19	"
"	20 "	1 0 "	25 "	3 25 "	5 2 25	"
"	21 "	3 55 "	25 "	6 45 "	4 2 50	Wallachia.
"	21 "	1 35 "	25 "	6 52 "	4 5 17	Belgrade.
Calcutta	21 "	11 16 a.m.	25 "	7 12 "	4 7 56	"
"	21 "	12 46 p.m.	25 "	7 21 "	4 6 35	Wallachia.
Akyab	21 "	6 20 "	25 "	7 25 "	4 1 8	"
Merut	21 "	5 30 "	25 "	7 28 "	4 1 58	"
Bombay	21 "	12 10 "	25 "	7 31 "	4 7 21	"
"	21 "	2 40 "	25 "	7 35 "	4 4 55	"
"	21 "	3 30 "	25 "	7 45 "	4 4 15	"
"	25 "	5 15 "	25 "	7 51 "	0 2 36	"
Calcutta	21 "	5 10 "	25 "	8 19 "	4 3 9	"
Akyab	21 "	5 23 "	25 "	8 40 "	4 3 17	Belgrade.
Kurrachee	20 "	3 3 "	25 "	8 45 "	5 5 42	"
Bombay	21 "	5 26 "	25 "	8 56 "	4 3 30	Wallachia.
Calcutta	21 "	10 54 "	25 "	9 0 "	4 10 6	"
"	20 "	5 20 "	25 "	10 56 "	5 5 36	"
Colombo	21 "	2 55 "	25 "	11 2 "	4 8 7	"
Calcutta	21 "	9 12 a.m.	26 "	12 35 a.m.	4 15 23	"
Bombay	21 "	2 45 p.m.	26 "	12 53 "	4 10 8	"
"	21 "	4 25 "	26 "	1 2 "	4 8 37	"
Calcutta	21 "	10 40 "	26 "	1 25 "	4 2 45	"
"	21 "	4 24 "	26 "	5 57 "	4 13 33	Belgrade.
"	25 "	3 44 "	26 "	6 7 "	0 14 23	"
Madras	21 "	5 0 "	26 "	6 12 "	4 13 12	"
Calcutta	23 "	4 25 "	26 "	6 17 "	2 13 53	No <i>viâ</i> .
Madras	21 "	8 0 a.m.	26 "	6 22 "	4 22 22	Belgrade.
Bombay	22 "	11 35 "	26 "	6 32 "	3 18 57	"
Kurrachee	22 "	2 15 p.m.	26 "	6 35 "	3 16 20	"
"	22 "	1 40 "	26 "	6 40 "	3 17 0	"
Bombay	21 "	6 18 "	26 "	6 43 "	4 12 25	"
Calcutta	22 "	11 25 a.m.	26 "	6 45 "	3 19 20	"
"	22 "	5 25 p.m.	26 "	7 59 "	3 14 34	"
"	22 "	8 0 a.m.	26 "	8 19 "	4 0 19	"
Bombay	22 "	4 32 p.m.	26 "	8 27 "	3 15 55	"
Calcutta	22 "	10 11 "	26 "	8 32 "	3 10 21	"
Bombay	23 "	12 17 "	26 "	8 34 "	2 20 17	No <i>viâ</i> .
Calcutta	22 "	6 0 "	26 "	8 38 "	3 14 38	Belgrade.
"	22 "	11 15 a.m.	26 "	8 44 "	3 21 29	"
Bombay	21 "	5 48 p.m.	26 "	8 49 "	4 15 1	"
Calcutta	21 "	11 0 a.m.	26 "	8 55 "	4 21 55	"
"	21 "	10 6 "	26 "	9 2 "	4 22 56	"
Bombay	21 "	1 37 p.m.	26 "	9 10 "	4 19 33	"
Calcutta	21 "	5 20 "	26 "	9 17 "	4 15 57	"
Agra	21 "	9 40 a.m.	26 "	6 41 p.m.	5 9 1	Nem.
Bombay	23 "	1 25 p.m.	26 "	7 6 "	3 5 41	Belgrade.
Galle	23 "	11 15 "	26 "	7 10 "	2 19 55	"
Calcutta	23 "	3 44 "	26 "	7 15 "	3 3 31	"
Bombay	21 "	11 56 a.m.	26 "	10 6 "	5 10 10	Moldavia.
"	21 "	2 55 p.m.	26 "	10 35 "	5 7 40	No <i>viâ</i> .
Calcutta	23 "	10 20 "	26 "	10 30 "	3 0 10	Belgrade.
Bombay	21 "	1 55 "	26 "	10 55 "	5 9 0	Wallachia.
Calcutta	24 "	3 25 "	26 "	11 4 "	2 7 29	Belgrade.
Colombo	22 "	5 10 "	26 "	11 12 "	4 6 2	"
Madras	21 "	2 0 "	26 "	11 17 "	5 9 17	Moldavia.
Kurrachee	21 "	3 20 "	26 "	11 30 "	5 8 10	"
Calcutta	23 "	8 0 "	26 "	11 16 "	3 3 16	Belgrade.
Bombay	No date -	12 15 "	26 "	11 28 "	-	Moldavia.
"	21 March	11 50 "	26 "	11 31 "	5 11 41	"
"	23 "	4 3 "	26 "	11 36 "	3 7 33	"
Calcutta	21 "	4 56 "	26 "	11 30 "	5 6 34	Belgrade.
Bombay	21 "	5 40 "	26 "	11 41 "	5 6 1	Moldavia.
"	22 "	4 5 "	26 "	11 48 "	4 7 43	Wallachia.
"	22 "	3 35 "	26 "	11 55 "	4 8 20	Moldavia.
Calcutta	24 "	3 10 "	27 "	12 11 a.m.	2 9 1	No <i>viâ</i> .
"	24 "	3 51 "	27 "	12 16 "	2 8 25	Belgrade.
Bombay	21 "	1 40 "	27 "	12 32 "	5 10 52	Moldavia.
Calcutta	21 "	3 32 "	27 "	12 40 "	5 9 8	Wallachia.
Rangoon	21 "	2 0 "	27 "	12 42 "	5 10 42	"
Calcutta	22 "	2 25 "	27 "	12 45 "	4 10 20	Moldavia.
Madras	21 "	2 0 "	27 "	12 49 "	5 10 49	"
Rangoon	20 "	6 30 "	27 "	12 47 "	6 6 17	"
Akyab	21 "	10 50 a.m.	27 "	1 3 "	5 14 13	Wallachia.
Bombay	21 "	3 30 p.m.	27 "	1 0 "	5 9 30	Moldavia.
"	22 "	4 0 "	27 "	1 7 "	4 9 7	"
Calcutta	22 "	5 19 "	27 "	1 10 "	4 7 51	Wallachia.
"	22 "	3 0 "	27 "	1 12 "	4 10 12	Moldavia.
Bombay	21 "	5 50 "	27 "	1 16 "	5 7 26	"
Colombo	21 "	4 40 "	27 "	1 17 "	5 8 37	"
Calcutta	22 "	5 0 "	27 "	1 21 "	4 8 21	"
"	22 "	2 20 "	27 "	1 30 "	4 11 10	"
Colombo	22 "	10 15 a.m.	27 "	1 34 "	4 15 19	Belgrade.
Bombay	22 "	1 53 p.m.	27 "	1 36 "	4 11 43	Moldavia.
Calcutta	22 "	4 20 "	27 "	1 39 "	4 9 19	"
Madras	22 "	10 0 "	27 "	1 42 "	4 3 42	"
Kurrachee	23 "	9 35 "	27 "	1 45 "	3 4 10	Belgrade.

App. No. 6.

MESSAGES from *India*, March 1866—*continued*.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
					<i>Days. hrs. min.</i>	
Bombay	22 March	11 20 p.m.	27 March	1 47 a.m.	4 2 27	Moldavia.
"	22 "	2 25 "	27 "	2 0 "	4 11 35	No <i>viâ</i> .
"	22 "	3 15 "	27 "	2 6 "	4 10 51	Moldavia.
"	22 "	5 50 "	27 "	5 20 "	4 11 30	"
Kurrachee	22 "	1 5 "	27 "	5 25 "	4 16 20	"
Bombay	23 "	5 43 "	27 "	5 30 "	3 11 47	No <i>viâ</i> .
Calcutta	23 "	4 24 "	27 "	5 35 "	3 13 11	Moldavia.
"	23 "	5 4 "	27 "	5 37 "	3 12 33	No <i>viâ</i> .
"	23 "	4 22 "	27 "	5 40 "	3 13 18	Moldavia.
"	22 "	2 30 "	27 "	5 42 "	4 15 12	"
Akyab	22 "	2 40 "	27 "	5 45 "	4 15 5	"
Calcutta	24 "	2 40 "	27 "	5 50 "	2 15 10	"
"	24 "	5 30 "	27 "	5 54 "	2 12 24	"
Bombay	22 "	2 50 "	27 "	9 0 "	4 18 10	"
Calcutta	22 "	3 20 "	27 "	9 22 "	4 18 2	"
"	24 "	12 0 "	27 "	9 28 "	2 21 28	"
Kurrachee	23 "	10 0 "	27 "	9 35 "	3 11 35	"
"	23 "	5 10 "	27 "	9 39 "	3 16 29	"
Calcutta	23 "	10 40 a.m.	27 "	9 42 "	3 23 2	"
"	23 "	1 16 p.m.	27 "	9 46 "	3 20 30	"
"	22 "	1 2 "	27 "	9 50 "	4 20 48	"
Akyab	23 "	12 50 "	27 "	11 25 "	3 22 35	"
Calcutta	24 "	11 48 "	27 "	12 8 p.m.	2 12 20	"
Bombay	23 "	4 10 "	27 "	12 51 "	3 20 41	"
"	26 "	5 55 "	27 "	11 0 "	1 5 5	Wallachia.
Calcutta	26 "	2 40 "	27 "	11 2 "	1 8 22	No <i>viâ</i> .
"	26 "	12 6 "	28 "	1 15 a.m.	1 13 9	Wallachia.
"	27 "	3 31 "	28 "	1 32 "	0 10 1	"
Bombay	24 "	1 20 "	28 "	1 40 "	3 12 20	"
"	26 "	5 50 "	28 "	1 51 "	1 8 1	"
Calcutta	26 "	4 10 "	28 "	1 57 "	1 9 47	"
Bombay	27 "	6 10 "	28 "	2 10 "	0 8 0	"
Colombo	23 "	3 0 "	28 "	10 15 "	4 19 15	Belgrade.
Calcutta	24 "	5 12 "	28 "	10 31 "	3 17 19	"
"	23 "	4 16 "	28 "	11 1 "	4 18 45	"
Bombay	24 "	3 10 "	29 "	1 35 "	4 10 25	"
Calcutta	26 "	11 54 a.m.	29 "	1 42 "	2 13 48	Wallachia.
Akyab	24 "	1 50 p.m.	29 "	8 0 "	4 18 10	Belgrade.
Calcutta	26 "	5 24 "	29 "	8 14 "	2 14 50	"
"	24 "	11 9 "	29 "	8 20 "	4 9 11	"
Kurrachee	24 "	11 22 a.m.	29 "	8 23 "	4 21 1	"
Bombay	26 "	5 55 p.m.	29 "	8 26 "	2 14 31	No <i>viâ</i> .
"	27 "	4 47 "	29 "	8 30 "	1 15 43	Belgrade.
Calcutta	24 "	2 51 "	29 "	8 34 "	4 17 43	"
Bombay	26 "	2 55 "	29 "	8 37 "	2 17 42	"
Calcutta	24 "	2 50 "	29 "	8 45 "	4 17 55	"
"	24 "	1 10 "	29 "	8 51 "	4 19 41	"
"	24 "	2 20 "	29 "	8 40 "	4 18 20	"
Lucknow	26 "	11 16 a.m.	29 "	8 44 "	2 21 28	"
Calcutta	24 "	5 0 p.m.	29 "	8 51 "	4 15 51	"
"	24 "	5 17 "	29 "	8 55 "	4 15 38	"
Madras	24 "	1 10 "	29 "	9 0 "	4 19 50	"
"	24 "	2 10 "	29 "	9 4 "	4 18 54	"
Bombay	24 "	4 10 "	29 "	9 5 "	4 16 55	"
Calcutta	24 "	11 40 a.m.	29 "	9 9 "	4 21 29	"
"	24 "	12 52 p.m.	29 "	9 7 "	4 20 15	"
Bombay	24 "	8 3 "	29 "	9 10 "	4 13 7	"
"	24 "	4 40 "	29 "	9 15 "	4 16 35	"
Calcutta	24 "	5 20 "	29 "	9 24 "	4 16 4	"
"	24 "	2 54 "	29 "	9 34 "	4 18 40	"
Bombay	23 "	4 40 "	29 "	12 50 p.m.	5 20 10	No <i>viâ</i> .
"	23 "	6 30 "	29 "	1 45 "	5 19 15	"
Calcutta	26 "	10 15 a.m.	29 "	4 6 "	3 5 51	Belgrade.
Bombay	26 "	5 8 p.m.	29 "	4 11 "	2 23 3	"
"	23 "	12 20 "	29 "	4 17 "	6 3 57	No <i>viâ</i> .
Calcutta	26 "	5 27 "	29 "	4 22 "	2 22 55	Belgrade.
"	23 "	5 15 "	29 "	5 30 "	6 0 15	No <i>viâ</i> .
Madras	24 "	5 0 "	29 "	8 5 "	5 3 5	Belgrade.
Calcutta	24 "	4 38 "	29 "	8 30 "	5 3 52	"
Colombo	26 "	1 50 "	29 "	8 35 "	3 6 45	"
Calcutta	23 "	7 50 "	29 "	8 32 "	6 0 42	Moldavia.
"	23 "	3 0 "	29 "	8 37 "	6 5 37	"
Bombay	23 "	2 30 "	29 "	8 47 "	6 6 17	"
Calcutta	24 "	3 20 "	29 "	9 0 "	5 5 40	Belgrade.
"	24 "	12 50 "	29 "	9 12 "	5 8 22	No <i>viâ</i> .
Bombay	29 "	11 45 a.m.	29 "	9 55 "	0 10 10	Belgrade.
"	29 "	2 20 p.m.	29 "	10 3 "	0 7 43	"
"	24 "	5 50 "	29 "	11 5 "	5 5 15	"
Calcutta	24 "	2 0 "	29 "	11 23 "	5 9 23	"
Bombay	23 "	7 30 "	29 "	11 36 "	6 4 6	Moldavia.
"	24 "	1 42 "	30 "	12 12 a.m.	5 10 30	Belgrade.
Colombo	26 "	11 58 a.m.	30 "	12 15 "	3 12 17	"
Bombay	24 "	5 55 p.m.	30 "	12 35 "	5 6 40	"
"	26 "	4 15 "	30 "	12 40 "	3 8 25	"
Akyab	26 "	1 40 "	30 "	12 41 "	3 11 1	"
Bombay	26 "	12 35 "	30 "	12 44 "	3 12 9	"
Rangoon	24 "	1 40 "	30 "	12 47 "	5 11 7	"
Akyab	26 "	2 55 "	30 "	12 52 "	3 9 57	"

MESSAGES from *India*, March 1866—*continued*.

Station from.	Time of Departure.		Arrival in London.		Time Taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
					<i>Days. hrs. min.</i>	
Bombay	26 March	1 10 p.m.	30 March	12 56 a.m.	3 11 46	Belgrade.
Calcutta	23 "	1 30 "	30 "	12 56 "	6 11 26	"
"	26 "	5 0 "	30 "	1 6 "	3 8 6	"
Bombay	26 "	12 52 "	30 "	1 25 "	3 12 33	No viâ.
Akyab	26 "	8 28 "	30 "	1 29 "	3 5 1	"
"	23 "	1 25 "	30 "	1 45 "	6 12 20	Moldavia.
Madras	23 "	4 40 "	30 "	1 54 "	6 9 14	"
Bombay	23 "	4 0 "	30 "	1 57 "	6 9 57	"
"	26 "	4 0 "	30 "	1 45 "	3 9 45	No viâ.
Calcutta	24 "	5 16 "	30 "	1 50 "	5 8 34	"
Akyab	23 "	2 50 "	30 "	2 0 "	6 11 10	Moldavia.
Bombay	23 "	1 30 "	30 "	2 4 "	6 12 34	"
Calcutta	23 "	5 0 "	30 "	2 10 "	6 9 10	"
Bombay	23 "	2 50 "	30 "	2 20 "	6 11 30	"
Colombo	26 "	11 10 a.m.	30 "	2 25 "	3 15 15	Belgrade.
Madras	26 "	2 45 p.m.	30 "	2 30 "	3 11 45	"
Bombay	22 "	8 0 "	30 "	2 40 "	7 6 40	Moldavia.
Rangoon	21 "	5 0 "	30 "	2 40 "	8 9 40	"
Calcutta	23 "	3 40 "	30 "	3 1 "	6 11 21	"
Bombay	23 "	5 25 "	30 "	3 13 "	6 9 48	"
Calcutta	26 "	11 2 a.m.	30 "	9 5 "	3 22 3	Belgrade.
Akyab	26 "	9 40 "	30 "	9 20 "	3 23 40	"
Calcutta	26 "	4 0 p.m.	30 "	9 43 "	3 17 43	"
"	26 "	11 27 a.m.	30 "	9 50 "	3 22 23	"
Galle	26 "	12 28 p.m.	30 "	10 2 "	3 21 34	"
Calcutta	27 "	5 5 "	30 "	10 4 "	2 16 59	"
Akyab	27 "	11 45 a.m.	30 "	10 8 "	2 22 23	"
Calcutta	27 "	10 25 "	30 "	10 13 "	2 23 48	"
"	27 "	5 26 "	30 "	10 38 "	2 17 12	"
"	27 "	5 0 p.m.	30 "	10 40 "	2 17 40	"
"	27 "	4 9 "	30 "	10 59 "	2 18 50	"
Bombay	28 "	2 55 "	30 "	11 15 "	1 20 20	"
Colombo	27 "	12 15 "	30 "	11 20 "	2 23 5	"
Calcutta	27 "	4 25 "	30 "	11 25 "	2 19 0	"
Bombay	28 "	5 15 "	30 "	11 34 "	1 17 19	"
"	27 "	3 0 p.m.	30 "	11 43 "	2 20 43	"
Calcutta	27 "	3 48 "	30 "	11 48 "	2 20 0	"
Bombay	27 "	2 25 "	30 "	11 52 "	2 21 27	"
"	27 "	3 30 "	30 "	11 59 "	2 20 29	"
"	27 "	5 48 "	30 "	12 5 p.m.	2 18 17	"
Calcutta	27 "	11 43 a.m.	30 "	12 11 "	3 0 28	"
"	27 "	7 35 "	30 "	12 49 "	3 5 14	"
"	27 "	3 37 p.m.	30 "	12 56 "	2 21 19	"
Bombay	27 "	12 20 "	30 "	1 2 "	3 0 42	"
Calcutta	27 "	1 50 "	30 "	1 2 "	2 23 12	"
Akyab	27 "	3 20 "	30 "	1 42 "	1 22 22	"
Bombay	28 "	4 20 "	30 "	2 0 "	1 21 40	"
Calcutta	28 "	3 43 "	30 "	2 4 "	1 22 21	"
Bombay	28 "	4 30 "	30 "	3 12 "	1 22 42	"
"	28 "	1 22 "	30 "	2 21 "	2 0 59	"
Madras	28 "	3 40 "	30 "	2 23 "	1 22 43	"
Bombay	27 "	4 25 "	30 "	2 45 "	2 22 20	"
Calcutta	27 "	3 20 "	30 "	2 50 "	2 23 30	"
Calcutta	27 "	4 30 "	30 "	3 4 "	2 22 34	"
"	27 "	1 45 "	30 "	3 14 "	3 1 29	"
Madras	27 "	12 50 "	30 "	3 49 "	3 2 59	"
"	27 "	5 55 "	30 "	3 52 "	2 21 57	"
Colombo	27 "	5 54 "	30 "	4 47 "	2 22 53	"
Bombay	28 "	5 12 "	30 "	10 18 "	2 5 6	"
"	28 "	5 31 "	30 "	10 28 "	2 4 57	"
"	28 "	5 51 "	30 "	10 29 "	2 4 38	"
"	28 "	5 48 "	30 "	11 13 "	2 5 25	"
"	27 "	5 4 "	30 "	11 40 "	3 6 36	"
"	28 "	5 25 "	30 "	11 43 "	2 6 18	"
"	28 "	5 5 "	30 "	11 53 "	2 6 48	"
"	28 "	5 3 "	31 "	12 20 a.m.	2 7 17	"
"	28 "	5 7 "	31 "	12 25 "	2 7 18	"
Akyab	28 "	12 55 "	31 "	12 28 "	2 11 33	"
Calcutta	29 "	4 58 "	31 "	8 25 "	1 15 27	"
"	29 "	5 35 "	31 "	8 28 "	1 14 53	"
"	30 "	5 50 "	31 "	9 30 "	0 14 40	Last.

NUMBER of Messages received by the Electric and International Telegraph Company from
India, between the 1st and 31st March.

1,011

Average number per day - - - - - 32½.

App. No. 6.

THE ELECTRIC AND INTERNATIONAL TELEGRAPH COMPANY.

MESSAGES received from INDIA, April 1866.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
					<i>Days. hrs. min.</i>	
Calcutta	29 March	4 45 p.m.	1 April	8 38 a.m.	2 15 53	Nem.
"	31 "	1 50 "	1 "	9 14 "	0 19 24	"
Madras	29 "	12 15 "	1 "	9 25 "	2 21 10	"
"	29 "	7 5 "	1 "	9 35 "	2 14 30	"
"	29 "	10 40 "	1 "	10 55 "	2 12 15	"
Shanghai	29 "	10 50 "	1 "	11 0 "	3 0 10	"
Bombay	30 "	1 43 "	1 "	11 23 "	1 21 43	Belgrade.
Calcutta	29 "	4 35 "	1 "	11 32 "	2 18 57	"
"	30 "	1 47 "	1 "	11 45 "	1 21 53	"
"	30 "	4 20 "	1 "	11 52 "	1 19 23	"
"	29 "	6 57 "	1 "	12 0 p.m.	2 17 3	"
Bangalore	29 "	7 0 "	1 "	12 8 "	2 17 8	"
Calcutta	29 "	4 35 "	1 "	1 35 "	2 21 0	"
Bombay	30 "	2 45 "	1 "	2 0 "	1 23 15	No viâ.
Calcutta	29 "	5 10 "	1 "	2 33 "	2 21 23	"
"	29 "	1 4 "	1 "	2 38 "	3 1 34	"
"	29 "	3 20 "	1 "	2 45 "	2 23 25	"
"	31 "	11 8 "	3 "	1 29 a.m.	2 2 21	Belgrade.
Galle	29 "	12 26 "	3 "	1 30 "	4 13 4	"
Singapore	29 "	12 0 "	3 "	1 35 "	4 13 35	"
Galle	29 "	12 0 "	3 "	7 27 "	4 19 27	Nem.
"	29 "	11 45 a.m.	3 "	7 44 "	4 19 59	Belgrade.
"	29 "	2 45 p.m.	3 "	7 55 "	4 17 10	"
Calcutta	2 April	4 5 "	3 "	8 30 "	0 16 25	Nem.
Bombay	2 "	8 40 "	4 "	2 45 "	1 6 5	Belgrade.
"	2 "	3 45 "	4 "	2 10 p.m.	1 22 25	"
Calcutta	2 "	9 40 "	4 "	4 0 "	1 18 20	No viâ.
"	2 "	11 35 a.m.	4 "	4 28 "	2 4 53	Belgrade.
Colombo	2 "	12 56 p.m.	4 "	4 30 "	2 3 34	"
Calcutta	2 "	6 4 "	4 "	9 20 "	2 3 16	"
Kurrachee	3 "	1 15 "	4 "	9 35 "	1 8 20	"
Bombay	3 "	4 10 "	5 "	7 47 a.m.	1 15 37	"
Kurrachee	3 "	4 20 "	5 "	8 50 "	1 16 30	"
Bombay	3 "	2 15 "	5 "	8 53 "	1 18 38	"
"	3 "	12 45 "	5 "	8 43 "	1 19 58	"
Calcutta	2 "	5 0 "	5 "	8 47 "	2 15 47	"
Kurrachee	3 "	5 15 "	5 "	9 38 "	1 16 23	"
Bombay	3 "	3 50 "	5 "	9 41 "	1 17 51	"
"	3 "	1 37 "	5 "	9 56 "	1 20 19	"
"	3 "	3 0 "	5 "	10 11 "	1 19 11	"
"	3 "	1 30 "	5 "	10 14 "	1 20 44	"
Madras	3 "	1 10 "	5 "	10 16 "	1 21 6	"
Calcutta	2 "	4 55 "	5 "	10 25 "	2 17 30	"
Bombay	3 "	5 20 "	5 "	10 36 "	1 17 16	"
"	3 "	5 20 "	5 "	11 27 "	1 18 7	"
Calcutta	2 "	4 4 "	5 "	11 33 "	2 19 29	"
Bombay	4 "	1 5 a.m.	5 "	12 22 p.m.	1 11 17	"
"	3 "	11 48 "	5 "	2 38 "	2 2 50	"
Calcutta	3 "	1 30 p.m.	5 "	3 3 "	2 1 33	"
Rangoon	3 "	2 45 "	5 "	3 26 "	2 0 41	"
Bombay	3 "	5 5 "	5 "	9 46 "	2 4 41	"
"	3 "	2 10 "	6 "	4 13 a.m.	2 14 3	Moldavia.
Calcutta	3 "	11 36 "	6 "	3 12 "	2 3 36	"
Rangoon	5 "	5 30 "	6 "	4 16 "	0 10 46	"
Bombay	5 "	4 15 "	6 "	4 20 "	0 12 5	"
Calcutta	3 "	2 5 "	6 "	4 26 "	2 14 21	"
Rangoon	3 "	3 0 "	6 "	4 3 "	2 13 3	Belgrade.
Madras	4 "	4 40 a.m.	6 "	8 39 "	2 3 59	"
"	4 "	3 0 p.m.	6 "	9 11 "	1 18 11	"
Bombay	3 "	5 50 "	6 "	11 50 "	2 18 0	Moldavia.
Kurrachee	3 "	4 30 "	6 "	12 55 p.m.	2 20 25	"
Calcutta	4 "	4 40 "	6 "	5 8 "	2 0 28	Belgrade.
"	4 "	3 0 "	6 "	5 10 "	2 2 10	"
Bombay	5 "	6 52 "	6 "	6 9 "	0 23 17	"
Calcutta	no date -	3 52 "	6 "	6 12 "	- - -	"
"	4 April	10 0 "	6 "	7 18 "	1 21 18	"
"	4 "	4 20 "	6 "	7 48 "	2 3 28	"
"	5 "	1 5 "	6 "	8 50 "	1 7 45	"
Rangoon	4 "	5 0 "	6 "	8 57 "	2 3 57	"
Akyab	4 "	1 0 "	6 "	9 13 "	2 8 13	"
Calcutta	no date -	2 15 "	6 "	10 30 "	- - -	"
"	"	2 50 "	6 "	10 52 "	- - -	"
"	2 April	5 0 "	6 "	11 3 "	4 6 3	Wallachia.
Bombay	6 "	3 20 "	6 "	11 10 "	0 7 50	"
Calcutta	5 "	5 55 "	7 "	8 35 a.m.	1 14 40	Belgrade.
"	6 "	10 50 a.m.	7 "	8 38 "	0 21 48	"
"	6 "	10 19 p.m.	7 "	8 49 "	0 10 30	"
"	4 "	6 30 "	7 "	9 0 "	2 14 30	"

MESSAGES from India, April 1866 — continued.

App. No. 6.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
					<i>Days. hrs. min.</i>	
Rangoon	3 April	5 20 p.m.	7 April	9 10 a.m.	3 15 50	Belgrade.
Bombay	5 "	2 7 "	7 "	10 6 "	1 19 59	"
Calcutta	5 "	11 12 "	7 "	10 20 "	1 11 8	"
Bombay	6 "	3 50 "	7 "	10 15 "	0 18 25	"
"	5 "	4 54 "	7 "	10 53 "	1 17 59	"
Calcutta	4 "	5 30 "	7 "	10 58 "	2 17 28	"
Galle	7 "	5 4 "	7 "	8 45 p.m.	0 3 41	"
Bombay	5 "	4 45 "	7 "	8 40 "	2 3 55	"
"	5 "	3 55 "	7 "	8 46 "	2 4 51	"
"	5 "	6 55 "	7 "	9 52 "	2 2 57	"
"	6 "	5 25 "	7 "	8 58 "	1 3 33	"
Colombo	5 "	3 52 "	7 "	9 3 "	2 5 11	"
Calcutta	5 "	5 27 "	7 "	8 57 "	2 3 30	"
Bombay	6 "	7 5 a.m.	7 "	9 35 "	1 14 30	"
Calcutta	6 "	11 18 p.m.	7 "	9 0 p.m.	0 21 42	"
Bombay	6 "	3 9 "	7 "	10 0 "	1 6 51	"
Calcutta	6 "	12 50 "	7 "	10 7 "	1 9 17	"
Simla	6 "	9 0 "	7 "	10 10 "	1 1 10	"
Calcutta	5 "	4 20 "	7 "	10 15 "	2 5 55	"
"	4 "	11 45 a.m.	7 "	10 18 "	3 10 33	"
"	4 "	7 30 p.m.	7 "	10 40 "	3 3 10	"
"	6 "	5 0 "	7 "	10 40 "	1 5 40	"
Bombay	6 "	12 53 "	7 "	10 51 "	1 9 58	Wallachia.
Madras	6 "	12 0 "	7 "	10 55 "	1 10 55	Belgrade.
Calcutta	4 "	5 20 "	7 "	11 0 "	3 5 40	"
Madras	5 "	5 50 "	7 "	11 6 "	2 5 16	"
Bombay	7 "	12 45 "	7 "	11 26 "	0 10 41	"
Calcutta	6 "	11 20 "	7 "	11 26 "	1 - 6	"
"	6 "	11 40 "	7 "	11 32 "	0 23 52	No viâ.
"	6 "	12 40 "	7 "	11 32 "	1 10 52	Wallachia.
"	6 "	11 53 a.m.	7 "	11 48 "	1 11 55	Belgrade.
"	6 "	12 20 p.m.	7 "	11 52 "	1 11 32	"
Bombay	5 "	3 35 "	7 "	11 59 "	2 8 24	Wallachia.
Madras	6 "	5 15 "	7 "	11 59 "	1 6 44	Belgrade.
Calcutta	6 "	12 10 "	8 "	12 14 a.m.	1 12 4	"
"	6 "	3 17 "	8 "	12 18 "	1 9 1	"
"	6 "	2 25 "	8 "	12 30 "	1 10 4	"
"	4 "	1 15 "	8 "	12 32 "	3 11 17	"
"	6 "	6 15 "	8 "	12 24 "	1 6 9	"
"	4 "	5 30 "	8 "	12 21 "	3 6 51	"
Colombo	6 "	7 0 "	8 "	7 55 "	1 12 55	Wallachia.
Calcutta	6 "	2 5 "	8 "	7 38 "	1 17 33	"
"	5 "	11 47 "	8 "	7 33 "	2 7 46	"
Colombo	6 "	2 10 "	8 "	7 30 "	1 17 20	"
Bombay	7 "	2 43 "	8 "	9 40 "	0 18 57	Belgrade.
"	7 "	2 45 "	8 "	10 24 "	0 19 39	"
Calcutta	6 "	3 37 "	8 "	10 28 "	1 18 51	No viâ.
Bombay	7 "	2 23 "	8 "	10 30 "	0 20 7	Belgrade.
"	7 "	3 18 "	8 "	10 34 "	0 19 16	"
Calcutta	6 "	4 40 "	8 "	10 38 "	1 17 58	"
"	6 "	5 27 "	8 "	10 41 "	1 17 14	"
Bombay	7 "	2 5 "	8 "	10 52 "	0 20 47	"
"	7 "	3 15 "	8 "	10 50 "	0 19 35	"
"	7 "	1 42 "	8 "	10 55 "	0 21 13	"
"	7 "	3 20 "	8 "	11 0 a.m.	0 19 40	"
Calcutta	7 "	1 35 "	8 "	10 34 p.m.	1 8 59	"
"	7 "	7 15 "	8 "	10 40 "	1 3 25	"
"	7 "	2 7 "	8 "	10 44 "	1 8 37	"
"	7 "	12 20 "	8 "	10 50 "	1 10 30	"
"	7 "	1 45 "	8 "	10 56 "	1 9 11	"
"	7 "	11 55 a.m.	9 "	7 21 a.m.	1 19 26	"
"	7 "	10 10 "	9 "	7 44 "	1 21 34	Moldavia.
"	5 "	11 0 p.m.	9 "	7 55 "	3 8 55	"
"	6 "	8 0 "	9 "	8 3 "	2 12 3	"
"	6 "	5 11 "	9 "	8 14 "	2 13 3	"
Bombay	7 "	4 10 "	9 "	8 19 "	1 16 9	"
Calcutta	5 "	6 10 "	9 "	8 27 "	3 14 17	"
"	6 "	5 10 "	9 "	8 31 "	2 15 21	"
"	6 "	5 10 "	9 "	8 37 "	2 15 27	"
"	6 "	4 50 "	9 "	8 39 "	2 15 49	"
Bombay	5 "	3 35 "	9 "	8 45 "	3 17 10	No viâ.
Akyab	6 "	12 0 "	9 "	9 3 "	2 21 3	"
Calcutta	no date	4 48 "	9 "	8 59 "	-	Wallachia.
Bombay	7 April	4 35 "	9 "	9 15 "	1 16 40	"
Calcutta	7 "	11 35 a.m.	9 "	9 22 "	1 21 47	"
"	7 "	11 48 "	9 "	9 32 "	1 21 44	"
"	7 "	2 16 p.m.	9 "	9 43 "	1 19 27	"
Madras	7 "	10 30 "	9 "	9 58 "	1 11 28	"
Bombay	7 "	4 35 "	9 "	10 8 "	1 17 33	"
Calcutta	7 "	2 45 "	9 "	10 40 "	1 19 55	Belgrade.
Akyab	6 "	11 15 a.m.	9 "	11 2 "	2 23 47	"
Rangoon	6 "	12 0 p.m.	9 "	11 8 "	2 23 8	"
Calcutta	7 "	3 15 "	9 "	11 20 "	1 20 5	"
"	7 "	3 10 "	9 "	11 27 "	1 20 17	"

App. No. 6.

MESSAGES from India, April 1866—continued.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
					Days, hrs. min.	
Calcutta	7 April	4 10 p.m.	9 April	11 30 p.m.	1 19 20	Belgrade.
"	7 "	5 26 "	9 "	7 46 "	2 2 20	"
Akyab	6 "	4 0 "	9 "	7 40 "	3 3 40	"
Calcutta	7 "	5 0 "	9 "	7 49 "	2 2 49	No vid.
"	7 "	5 20 "	9 "	7 50 "	2 2 30	"
"	5 "	2 0 "	9 "	7 53 "	4 5 53	Belgrade.
Bombay	8 "	12 20 "	9 "	8 6 "	1 7 46	"
"	9 "	1 10 "	9 "	8 36 "	0 7 26	"
Calcutta	7 "	4 30 "	9 "	8 45 "	2 4 15	"
Bombay	9 "	11 40 a.m.	9 "	8 39 "	0 8 59	"
Akyab	7 "	9 25 p.m.	9 "	9 54 "	2 0 29	"
Calcutta	no date -	5 20 "	9 "	10 34 "	- - -	"
Bombay	"	6 35 "	9 "	10 42 "	- - -	"
"	9 April	1 20 "	10 "	2 20 a.m.	0 13 0	"
Bangalore	9 "	11 40 "	10 "	2 22 "	0 2 42	"
Bombay	9 "	12 42 "	10 "	2 26 "	0 13 44	"
"	9 "	12 37 "	10 "	2 34 "	0 13 57	"
Rangoon	7 "	4 36 a.m.	10 "	7 0 "	3 2 24	"
Bombay	9 "	4 0 p.m.	10 "	9 28 "	0 17 28	"
"	9 "	5 56 "	10 "	12 32 p.m.	0 18 36	"
Calcutta	9 "	10 0 "	10 "	3 33 "	0 17 33	"
"	7 "	6 50 "	10 "	4 58 "	2 22 8	"
Bombay	9 "	5 3 "	10 "	2 51 "	0 21 48	"
"	9 "	5 5 "	10 "	2 56 "	0 21 51	"
Calcutta	9 "	11 15 a.m.	10 "	3 0 "	1 3 45	"
Bombay	9 "	5 50 p.m.	10 "	3 3 "	0 21 13	"
"	9 "	5 35 "	10 "	3 8 "	0 21 33	"
Calcutta	9 "	12 50 "	10 "	9 50 "	1 9 0	"
Bombay	9 "	5 58 "	10 "	10 42 "	1 4 44	"
"	10 "	7 22 "	11 "	1 0 a.m.	0 5 38	"
Akyab	10 "	12 12 "	11 "	1 0 "	0 12 40	"
Madras	9 "	3 50 "	11 "	1 4 "	1 9 14	"
Rangoon	9 "	8 12 a.m.	11 "	1 9 "	1 16 57	"
Calcutta	9 "	1 10 "	11 "	1 12 "	1 12 2	"
"	9 "	12 40 "	11 "	1 16 "	1 12 36	"
Kurrachee	10 "	10 49 "	11 "	1 36 "	0 14 47	"
Madras	9 "	5 0 p.m.	11 "	2 40 "	1 9 40	"
Calcutta	9 "	2 8 "	11 "	2 48 "	1 12 40	"
Madras	9 "	5 40 "	11 "	2 46 "	1 9 6	"
Bombay	10 "	1 50 "	11 "	10 3 "	0 20 13	"
Calcutta	9 "	11 49 "	11 "	4 35 p.m.	2 4 46	"
Bombay	10 "	1 0 "	11 "	4 44 "	1 3 44	"
"	10 "	5 56 "	11 "	5 30 "	0 23 34	"
Calcutta	9 "	5 0 "	11 "	6 4 "	2 1 4	"
"	9 "	1 5 "	11 "	6 12 "	2 5 7	"
Hong Kong	9 "	5 3 "	11 "	6 12 "	2 1 9	"
Singapore	9 "	1 8 "	11 "	6 20 "	2 5 12	"
Calcutta	9 "	1 30 "	11 "	9 15 "	2 7 45	"
"	9 "	5 26 "	11 "	10 15 "	2 4 49	"
Bombay	9 "	5 30 "	11 "	10 32 "	2 5 2	"
"	10 "	1 15 "	11 "	10 58 "	1 9 43	"
Calcutta	9 "	5 15 "	12 "	12 14 a.m.	2 6 59	"
Akyab	10 "	8 20 "	12 "	12 28 "	1 4 8	"
Calcutta	9 "	5 29 "	12 "	12 39 "	2 7 10	"
"	9 "	5 20 "	12 "	7 8 "	2 13 48	"
Rangoon	9 "	12 50 "	12 "	5 8 p.m.	3 4 18	Moldavia.
Calcutta	9 "	5 7 "	12 "	6 20 "	3 1 13	"
"	9 "	3 10 "	12 "	7 37 "	3 4 27	"
Bombay	10 "	12 25 a.m.	12 "	7 58 "	2 19 33	"
"	10 "	5 50 p.m.	12 "	8 31 "	2 2 41	"
"	10 "	5 52 "	12 "	8 48 "	2 2 56	"
Galle	no date -	5 10 "	13 "	12 14 a.m.	- - -	"
Singapore	8 April	5 26 "	13 "	6 31 p.m.	5 1 5	"
Calcutta	11 "	1 9 a.m.	13 "	7 43 "	2 18 34	Belgrade.
Hong Kong	9 "	5 50 p.m.	13 "	7 55 "	4 2 5	"
Calcutta	10 "	11 8 "	13 "	7 49 "	2 20 41	"
Hong Kong	9 "	5 20 "	13 "	7 51 "	4 2 31	"
Singapore	9 "	5 20 "	13 "	8 0 p.m.	4 2 40	No vid.
Calcutta	10 "	3 10 "	14 "	2 0 a.m.	3 10 50	Belgrade.
Galle	9 "	5 5 "	14 "	2 6 p.m.	4 21 1	"
Singapore	9 "	5 20 "	14 "	4 51 "	4 23 31	"
Calcutta	10 "	10 25 "	14 "	8 17 "	3 21 52	"
Shanghai	9 "	5 20 "	14 "	8 25 "	5 3 5	"
Singapore	9 "	5 40 "	14 "	8 34 "	5 2 54	"
Galle	9 "	5 30 "	15 "	1 0 a.m.	5 7 30	"
Rangoon	no date -	3 10 "	15 "	12 42 "	- - -	"
Calcutta	12 April	5 0 "	15 "	3 35 p.m.	2 22 35	"
"	10 "	10 42 "	15 "	6 40 "	4 19 58	"
"	11 "	4 29 "	15 "	8 13 "	4 3 44	"
Bombay	11 "	4 10 "	15 "	8 26 "	4 4 16	"
Calcutta	10 "	5 37 "	15 "	7 32 "	5 1 55	"
Galle	10 "	5 30 "	15 "	8 35 "	5 3 5	"
Bombay	11 "	5 0 "	15 "	8 40 "	4 3 40	"
Calcutta	11 "	2 10 "	15 "	8 44 "	4 6 34	"

MESSAGES from *India*, April 1866—*continued*.

App. No. 6.

Station from.	Time of Departure.		Arrival in London.		Time taken in Transmission.	Route.
	Date.	Hour.	Date.	Hour.		
					<i>Days. hrs. min.</i>	
Rangoon - - -	10 April	8 17 p.m.	15 April	9 20 p.m.	5 1 3	Belgrade.
Calcutta - - -	12 "	12 48 "	15 "	9 24 "	3 8 36	"
" - - -	10 "	2 0 "	15 "	9 31 "	5 7 31	Wallachia.
Rangoon - - -	10 "	3 30 "	15 "	10 15 "	5 6 45	"
Calcutta - - -	10 "	2 50 "	15 "	10 20 "	5 7 30	"
" - - -	10 "	4 37 "	15 "	10 26 "	5 5 49	"
Bombay - - -	13 "	4 25 "	15 "	11 47 "	2 7 22	Belgrade.
" - - -	10 "	4 30 "	16 "	7 2 a.m.	5 14 32	Wallachia.
Madras - - -	10 "	10 0 a.m.	16 "	7 4 "	5 21 4	"
Bombay - - -	13 "	1 33 p.m.	16 "	7 7 "	2 17 34	"
Calcutta - - -	11 "	5 20 "	16 "	7 35 "	4 14 15	"
" - - -	11 "	2 4 "	16 "	7 42 "	4 17 38	"
Bombay - - -	11 "	2 25 "	16 "	7 46 "	4 17 21	"
" - - -	11 "	5 30 "	16 "	8 19 "	4 14 49	"
Calcutta - - -	11 "	5 17 "	16 "	8 15 "	4 14 53	"
Madras - - -	11 "	12 55 "	16 "	8 17 "	4 19 22	"
Calcutta - - -	11 "	1 40 "	16 "	8 26 "	4 18 46	"
Bombay - - -	13 "	3 50 "	16 "	8 30 "	2 16 40	"
" - - -	13 "	3 15 "	16 "	8 36 "	2 17 21	"
" - - -	13 "	7 14 "	16 "	8 40 "	2 13 16	"
" - - -	12 "	5 47 "	16 "	8 40 "	3 14 53	"
" - - -	13 "	12 48 "	16 "	8 55 "	2 20 7	"
Calcutta - - -	10 "	4 37 "	16 "	9 5 "	5 16 28	"
Bombay - - -	11 "	4 0 p.m.	16 "	9 15 "	4 17 15	"
Calcutta - - -	10 "	10 22 a.m.	16 "	9 24 "	5 23 2	"
" - - -	13 "	3 39 p.m.	16 "	9 27 "	2 17 48	"
" - - -	13 "	12 45 "	16 "	9 30 "	2 20 45	"
Colombo - - -	11 "	2 55 "	16 "	9 32 "	4 18 37	Belgrade.
Bombay - - -	13 "	3 30 "	16 "	9 33 "	2 18 3	Wallachia.
Calcutta - - -	13 "	4 27 "	16 "	9 35 "	2 17 8	"
" - - -	11 "	11 20 a.m.	16 "	9 59 "	4 22 39	"
Bombay - - -	14 "	6 35 p.m.	16 "	10 7 "	1 15 32	Belgrade.
Calcutta - - -	11 "	5 50 "	16 "	10 8 "	4 16 18	Wallachia.
Madras - - -	13 "	7 0 a.m.	16 "	10 11 "	3 3 11	"
Colombo - - -	13 "	10 57 "	16 "	10 25 "	2 23 28	Belgrade.
Bombay - - -	12 "	5 50 p.m.	16 "	10 46 "	3 16 56	Wallachia.
Galle - - -	11 "	11 20 a.m.	16 "	11 0 "	4 23 40	"
Bombay - - -	13 "	3 55 p.m.	16 "	3 18 p.m.	2 23 23	Belgrade.
Colombo - - -	10 "	2 45 "	16 "	3 55 "	6 1 10	"

NUMBER of Messages received by the Electric and International Telegraph Company from *India* between the 1st April and 16th April :

285

Average number per day - - - - - 17 $\frac{1}{2}$.

Appendix, No. 7.

App. No. 7.

MEMORANDUM relating to the Transmission of MESSAGES to *India* through the Persian Gulf Cable.

ROUTE.—(Same as Hague.)

- 1.—Through Paris, Munich, Vienna, Belgrade, Nissa, Constantinople, and Turkey in Asia, to the head of the Gulf.
- 2.—Paris, Turin, the Otranto and Valona Cable, Constantinople, and Turkey in Asia, to the head of the Gulf.
3. Brussels, Berlin, Vienna, Belgrade, Nissa, Constantinople, and Turkey in Asia, to the head of the Gulf.
4. Brussels, Berlin, Myslowitz, Tiflis, Djoulfa, Tauris, Teheran, Ispahan, and Bushire.

(The fourth route is never used, except when all others are unavailable.)

Place sent to.

Paris for the first and second routes, and Brussels or Berlin for the third and fourth. (The messages are usually sent to France, but sometimes to Belgium, in order to prevent delay, and the blocking up of the French lines.)

Number of Messages.

About 6,000 have been forwarded since the opening of the line (at present about 150 a week are sent); about two-thirds sent through France, and one-third through Belgium. The Company always gives the preference to the Belgrade route.

Rate, and how accounted for.

To Calcutta, and places west of Calcutta				£. 5. 1.
				<i>Fr. cts.</i>
London to Calais	-	3	-	
Calais to Calcutta, &c.		123	37½	
Total	- - -	126	37½	or £. 5. 1. 1.
				<i>Fr. cts.</i>
London to Hague	-	5	-	
Hague to Calcutta, &c.		121	50	
Total	- - -	126	50	or £. 5. 1. 3.

The rates were given to the Company by the India Office, the annexed tariff having been received from that Office.

Time of Transmission.

Longest, 17 days; shortest, 17 hours. Average, about 48 hours.

There have been latterly some favourable instances of quick transmission. A message received in London—

On the 1st April, at 6.12 a.m., is dated Bombay, 31st March, 2.20 p.m.	= 21 hours.
" " " 6.20 " " " " " 1.55 "	= 20 "
" " " 7.52 " " " " " 4.40 "	= 20 "
" 15th April, at 11.44 " " " " 13th April, 5.22 "	= 46 "
" " " 8.57 " " " " " 5.49 "	= 44 "
" " " 8.55 " " " " " 6.30 "	= 44 "

Allowing five hours for difference of time between Bombay and Greenwich.

Accounts.

Are exchanged monthly, and a statement or *décompte* is sent to the Company quarterly, and the balance shown thereby paid a few weeks afterwards.

Complaints, and how investigated.

The Company have received 109 complaints of delay, non-delivery, or mutilation of the messages sent.

The investigation of complaints proceeds as follows:—We search out the original message and make a copy of it. We then put the matter forwarded, specifying the ground of complaint, accompanied by the necessary copies to the Administration to whom the message had been forwarded, viz. French or Belgian, and they having investigated its transit over their territory pass it on until it shall have reached the point or points where the irregularities arose.

In only two cases have we obtained solutions of complaints; one where the French sent a message to St. Gall, in Switzerland, instead of to Galle, Colombo; the other, where the message was entirely lost in Italy. In these cases the Administrations in fault refunded the charges paid for the telegrams. We have received no complaints whatever from the other side.

By Lord Dufferin's letter, dated 1st March 1865, notifying the opening of the line, the authorities repudiated any responsibility on account of irregularities, owing to a part of the line over which the messages had to pass being in an inefficient state. Notice of this was therefore given to our customers and the public by circular.

Submarine Telegraph Company,
April 1866.

Appendix, No. 8.

App. No. 8. PAPERS handed in by Mr. *Frederick Hill*.

[See Questions 157 and 381.]

(A.)—STATEMENT showing the Amount Repaid by the Government of India to the Post Office on account of the Loss incurred on the Mail Service between the United Kingdom and India, China, Ceylon, Mauritius, and the Mediterranean, &c., during the Year ended 31st March 1866, after deducting the proportion payable by the Australian Colonies on account of the Mail Service between England and Point de Galle.

	£.
Amount Paid to the Peninsular and Oriental Steam Navigation Company for Conveyance of Mails during the year - - - - -	204,508
Amount of Expenses incurred in the Conveyance of Mails during the year; see Statement (B.) - - - - -	16,790
Cost of Conveyance of the Indian Mails by Special Packets between Dover and Calais during the year - - - - -	580
Salaries of Naval Agents in charge of the Indian Mails, during the year - -	2,795
	£. 224,673
DEDUCT:	
Net Produce of the Mails during the year; see Statement (C.) - - - -	137,760
	£. 86,913
One-half of this Amount has been Repaid by the Indian Government, viz. -	£. 43,456

General Post Office,
14 April 1866.

Geo. Chetwynd,
Receiver and Accountant General.

(B.)—STATEMENT of the Expenses incurred for the Conveyance of Mails to and from the East Indies and China, during the Year to 31st March 1866.

	£.
The Expenses of the Agencies at Alexandria and Suez - - - - -	2,216
The Salaries and Expenses of Officers travelling in charge of Indian Mails - -	1,335
The Sum paid to the Pacha of Egypt for Conveyance of Mails through his territory (including 160 £. loss by exchange) - - - - -	8,921
The Cost of the Supply, Repair, and Painting of Indian Mail Boxes - - -	3,550
Allowances to Janissaries for accompanying Mails between Alexandria and Suez -	768
	£. 16,790

General Post Office,
14 April 1866.

Geo. Chetwynd,
Receiver and Accountant General.

(C.)—AN ESTIMATED STATEMENT of the Gross and Net Produce of the Mails between the United Kingdom and the East Indies, Ceylon, China, the Mauritius, and the Mediterranean, for the Year to 31st March 1866.

	£.
1. Total Postage on Ordinary, Official, and Soldiers' Letters, inwards and outwards, <i>viâ</i> Southampton - - - - -	60,250
2. Total Postage on Ordinary, Official, and Soldiers' Letters, inwards and outwards, <i>viâ</i> Marseilles - - - - -	105,180
3. Total Postage on Newspapers, inwards and outwards, <i>viâ</i> Southampton - - -	7,269
4. Total Postage on Newspapers, inwards and outwards, <i>viâ</i> Marseilles - - -	23,684
5. Total Postage on Books, inwards and outwards, <i>viâ</i> Southampton and <i>viâ</i> Marseilles - - - - -	8,702
6. Total Postage on the intermediate Correspondence of the several Offices of India, Ceylon, China, Mauritius, and the Mediterranean - - - - -	19,500
7. Packet Postage between Spain and the Philippine Islands - - - - -	1,880
9. Postage on account of Correspondence forwarded in transit through the United Kingdom - - - - -	7,455
9. Amount Credited to the United Kingdom by France and the Netherlands for the Conveyance of the French and Dutch Closed Mails - - - - -	9,742
	243,662
DEDUCT :	
1. For Transit Rate Payable to France for Conveyance of the Marseilles portion of the Mails (letters, papers, and books) - - -	£. 37,200
2. The Colonial Share of Postage on the Correspondence between the United Kingdom and India, &c., inwards and outwards, <i>viâ</i> Southampton and <i>viâ</i> Marseilles - - - - -	38,821
3. The British Inland Rate - - - - -	26,621
4. Returned Letters - - - - -	3,260
	105,902
NET Postage for the Year - - - £.	137,760

General Post Office,
14 April 1866.

Geo. Chetwynd,
Receiver and Accountant General.

[See Question 204.]

The Secretary of the Treasury to the Postmaster General.

(13,285—7/7.)

My Lord,

Treasury Chambers, 11 July 1864.

I AM directed by the Lords Commissioners of Her Majesty's Treasury to acquaint you that my Lords have had under their consideration, with the view to the framing of the Post Office Packet Estimates of the year, the subject of the new contracts for conveying the mails to the East, and the mode in which the cost should be borne by the Revenue of the United Kingdom, and of India respectively.

I have to state that, under the old contracts in force prior to this year, the following were the arrangements :

1. The British Government defrayed all cost of transmitting the letters from this country to Alexandria.

2. The East India Company defrayed the cost of transmitting them through Egypt (6,000 £.), but latterly 2,000 £. additional has been paid by the Post Office on account of the extension of the service to Australia.

3. The Bombay mail has been conveyed from Aden to Bombay by the vessels of the East India Company, at an estimated cost of 100,000 £., towards which the British Government had paid the East India Company the sum of 50,000 £.

4. The remaining services were contracted for at a cost of 160,000 £., of which the East India Company paid seven-sixteenths, or 70,000 £., and the British Government 90,000 £.

5. Under these arrangements the British Government received all the postage, amounting to 127,896 £. (see report of Committee on Contract Packets, page 79), while the East India Company receive their letters free. The above sum, including the amount of the letters of the British Government, the amount of postage which the Post Office would receive, according to the said account, if the East India Company paid their share, as is done by the British Government, would be 146,878 £.

App. No. 8.

According to the new arrangements made for these services, the entire cost would be as follows:

1. Contract with Peninsular and Oriental Steam Navigation Company, for the conveyance of mails from England to the East, including the service to Australia, but not to Bombay, amounts to 199,600 *l*.

3. The contract with the same Company for conveying the mails from Aden to Bombay is 24,700 *l*.

3. The entire cost of transmission through Egypt is 8,000 *l*. The whole cost may then be thus stated:

1.	-	-	-	-	-	£. 199,600
2.	-	-	-	-	-	24,700
3.	-	-	-	-	-	8,000

TOTAL COST - - - £. 232,300

It appears to my Lords that it is extremely desirable to reduce to a clear and simple form the relations of the Home Government and that of India, in respect to this expenditure, and the following are the principles which my Lords are of opinion may be adopted, with a view equitably to define those relations:

1. The whole cost may be said to be incurred with a view to the commercial and political relations of this country with India chiefly, but also to a considerable extent with China and Australia.

2. So far as the commercial relations between this country and India are concerned, my Lords are of opinion that each country is equally interested, and therefore the Revenues of England and India may fairly be called upon to contribute equally to any expenditure, the object of which is to encourage such commercial intercourse.

So far as political considerations are involved, it appears to my Lords, adverting to the principle upon which the Indian Government is conducted, in relation to financial matters, that the whole cost on this consideration should be defrayed from Indian Revenue.

3. In respect to the cost of this service, so far as China is concerned, the proportions which should be assigned to the two Revenues respectively, appear to my Lords to be equal moieties to each. In the first place, the commerce between England and China, and between India and China, may be said to be about equal; and, in the second place, as the establishment of a British Colony and Consular Agents in China have for their only object the protection and extension of commerce, the political interest may also be said to be equal to the British and Indian Governments.

4. So far as Australia is concerned, the interests of England, commercially considered, greatly preponderate over those of India, and political interest may be said to be entirely British; but this branch of the service is small compared with the others, and especially with that of India.

5. In the whole, then, my Lords are of opinion that a fair arrangement between the Revenues of the United Kingdom and those of India will be, that any loss incurred from these services shall be borne in equal moieties by each.

6. In order to reduce services so complex into the greatest simplicity, my Lords are of opinion that it will be desirable, that the British Government should pay the whole of the expenditure, and receive all the postage, including that belonging to the Home Government, as well as to the East India Company; and that one-half of the loss then left should be paid by the East India Company to the Home Government.

On this principle, the account will stand as follows:

1. General Contract with Peninsular and Oriental Steam Navigation Company	-	-	-	-	-	-	£. 199,600
2. Ditto to Bombay	-	-	-	-	-	-	24,700
3. Transmission through Egypt (6,000 <i>l</i> . now paid by the East India Company, and 2,000 <i>l</i> . by the Post Office)	-	-	-	-	-	-	8,000
							232,300
Deduct receipts of Post Office, including the letters of both Governments	-	-	-	-	-	-	146,878
							£. 85,422

My Lords, therefore, propose that in future all the costs included in the sum of 232,300 *l*. shall be defrayed by the Home Government, that the Post Office shall charge the postage of the Indian Government to the East India Company, receiving the same into its Revenue, and that the sum of 42,711 *l*. shall be paid by the East India Company to the Home Government as a moiety of the net loss.

The Postmaster General,
&c. &c. &c.

I have, &c.

(signed) *James Wilson.*

[See Question 264.]

FRENCH MAIL STEAM SHIPS.

COMPAGNIE DES SERVICES MARITIMES DES MESSAGERIES IMPÉRIALES.

Handbook of Information.

Overland Route to India, China, Japan, Reunion, and Mauritius.

STEAM FLEET of the MESSAGERIES IMPÉRIALES.

Indian Ocean Lines.

					Horse Power.						Horse Power.	
Tigre	-	-	-	-	screw	500	La Bourdonnais	-	-	-	screw	280
Impératrice	-	-	-	-	"	500	Meinam	-	-	-	"	280
Donnai	-	-	-	-	"	500	Dupleix	-	-	-	"	280
Cambodge	-	-	-	-	"	500	Emirne	-	-	-	"	200
Alphee	-	-	-	-	"	400	Mozambique	-	-	-	"	200
Erymanthe	-	-	-	-	"	400	Capitole	-	-	-	paddle	200

Atlantic Lines.

Horse Power.					Horse Power.				
Guienne	-	-	-	paddle 500	Carmel	-	-	-	paddle 370
Navarre	-	-	-	" 500	Pericles	-	-	-	" 120
Estramadure	-	-	-	" 500					

Mediterranean and Black Sea Lines.

Horse Power.					Horse Power.					
Amerique	-	-	-	screw	450	Copernic	-	-	screw	200
Peluse	-	-	-	"	400	Cheliff	-	-	"	180
Mœris	-	-	-	"	400	Mitidja	-	-	"	180
Said	-	-	-	"	400	Delta	-	-	"	150
Danube	-	-	-	"	370	Sinai	-	-	paddle	370
Cydnus	-	-	-	"	370	Thabor	-	-	"	370
Newa	-	-	-	"	370	Pausilippe	-	-	"	320
Phase	-	-	-	"	370	Quirinal	-	-	"	320
Euphrate	-	-	-	"	350	Aunis	-	-	"	250
Volga	-	-	-	"	320	Saintonge	-	-	"	250
Indus	-	-	-	"	300	Caire	-	-	"	220
Gange	-	-	-	"	300	Osiris	-	-	"	220
Godavery	-	-	-	"	280	Vatican	-	-	"	200
Nil	-	-	-	"	280	Oronie	-	-	"	180
Menzaleh	-	-	-	"	280	Merovée	-	-	"	180
Aréthuse	-	-	-	"	250	Bosphore	-	-	"	180
Borysthene	-	-	-	"	240	Balkan	-	-	"	160
Meandre	-	-	-	"	240	Taurus	-	-	"	160
Simois	-	-	-	"	240	Rion	-	-	"	65
Hermus	-	-	-	"	240					
Ilissus	-	-	-	"	240					
Mersey	-	-	-	"	200					
Tamise	-	-	-	"	200					
Clyde	-	-	-	"	200					

CHARTERED.					
Kabyle	-	-	-	screw	280
Oasis	-	-	-	"	280
Marabout	-	-	-	"	280

CHARTERED.

Kabyle	-	-	-	screw	280
Oasis	-	-	-	"	280
Marabout	-	-	-	"	280

Building.

					Horse Power.						Horse Power.		
Niémen	-	-	-	-	screw	320	Eridan	-	-	-	-	screw	320
Tibré	-	-	-	-	"	280							

App. No. 8.

INDIA, CHINA, JAPAN, AND MAURITIUS LINES.

<i>Marseilles to Hong Kong.</i>			<i>Shanghai to Japan.</i>		
STATIONS.	DATES.		STATIONS.	DATES.	
	Arrival.	Departure.		Arrival.	Departure.
Marseilles - - - - -	"	19 — 2 p.m.	Shanghai - - - - -	"	5 — 6 a.m.
Messina - - - - -	21 —	21 —	Yokohama - - - - -	10 —	13 — 6 p.m.
Alexandria - - - - -	25 —	"	Shanghai - - - - -	18 —	"
Suez - - - - -	"	27 —	<i>Singapore to Batavia.</i>		
Aden - - - - -	3 —	3 —	STATIONS.	DATES.	
Point-de-Galle - - - - -	13 —	14 —		Arrival.	Departure.
Singapore - - - - -	20 —	21 —	Singapore - - - - -	"	21
Saigon - - - - -	24 —	25 —	Batavia - - - - -	24	29 a.m. 8 1/2
Hong Kong - - - - -	29 —	25 — 2 p.m.	Singapore - - - - -	2	"
Saigon - - - - -	29 —	30 —	<i>Marseilles to Réunion and Mauritius.</i>		
Singapore - - - - -	3 —	4 —	STATIONS.	DATES.	
Point-de-Galle - - - - -	10 —	12 —		Arrival.	Departure.
Aden - - - - -	21 —	22 —	Marseilles - - - - -	"	9 — 2 p.m.
Suez - - - - -	27 —	"	Messina - - - - -	11 —	11 —
Alexandria - - - - -	"	29 —	Alexandria - - - - -	15 —	"
Messina - - - - -	3 —	3 —	Suez - - - - -	"	17 — 4 p.m.
Marseilles - - - - -	5 —	"	Aden - - - - -	23 —	23 —
<i>Point-de-Galle to Calcutta.</i>			Mahé (Seychelles) - - - - -	30 —	30 —
STATIONS.	DATES.		Saint-Denis (Réunion) - - - - -	5 —	5 —
	Arrival.	Departure.	Port-Louis (Mauritius) - - - - -	6 —	18 — p.m.
Point-de-Galle - - - - -	"	13 —	Saint-Denis (Réunion) - - - - -	19 —	19 —
Pondicherry - - - - -	15 —	15 —	Mahé (Seychelles) - - - - -	24 —	24 —
Madras - - - - -	16 —	16 —	Aden - - - - -	1 —	1 —
Calcutta - - - - -	20 —	3 — 8 a.m.	Suez - - - - -	7 —	"
Madras - - - - -	6 —	7 —	Alexandria - - - - -	"	9 —
Pondicherry - - - - -	7 —	7 —	Messina - - - - -	13 —	13 —
Point-de-Galle - - - - -	10 —	"	Marseilles - - - - -	15 —	"
<i>Hong Kong to Shanghai.</i>					
STATIONS.	DATES.				
	Arrival.	Departure.			
Hong Kong - - - - -	"	30 —			
Shanghai - - - - -	4 —	20 — 8 a.m.			
Hong Kong - - - - -	23 —	"			

The following dates are approximate only, except those relating to Marseilles, Hong Kong, Calcutta, Mauritius, Batavia, Shanghai, and Yokohama, at all other ports the dates of departure depend on those of arrival.

INFORMATION FOR THE USE OF PASSENGERS.

India, China, and Japan Lines.

THE Company's steamers leave Marseilles on the 19th of every month at 2 p.m., and after staying a few hours at Messina, arrive at Alexandria, generally, on the 25th, the official date being early on the 26th.

See regulations for the transit through Egypt.

At

At Suez one of the Company's steamers will receive passengers, and, as the passage up the Mediterranean and the transit may permit, will leave on the 26th or 27th, touching at Aden *en route*, and arrive at Point de Galle on the 11th or 13th of the following month, according to the departure from Suez, the length of the month, or the weather.

At Point de Galle another steamer belonging to the Company will await passengers for India, and sail a few hours after the arrival of the steamer from Suez, calling at Pondicherry and Madras *en route* to Calcutta.

The steamer arriving from Suez will continue the voyage to Singapore, arriving there on the 18th to 20th; Saigon 23rd to 24th; and Hong Kong, port of destination, on the 28th to 29th.

Passengers for Shanghai will embark at Hong Kong on another of the Company's steamers, due there on the 24th, and proceed to their destination shortly after. The passage between those two ports is usually made in four days.

Passengers for Batavia are conveyed by another of the Company's steamers, leaving Singapore for Batavia about eight hours after the arrival of the steamer from Suez.

The steamer going from Hong Kong to Shanghai, leaves Hong Kong only after the arrival of steamer coming from Suez; the steamer going from Shanghai and Yokohama, leaves Shanghai only after the arrival of the steamer coming from Hong Kong.

On the homeward voyage the dates of arrivals and departures are as follows:

Leave Yokohama on the 13th, arrive at Shanghai on the 18th.

Leave Shanghai on the 21st, arrive at Hong Kong on the 24th.

Leave Hong Kong on the 26th, arrive at Saigon on the 30th.

Leave Saigon on the 30th or 1st, arrive on the 3rd at Singapore; one finds the steamer departed from Batavia on the 29th of the last month.

Leaving the same day for, and arriving at Point de Galle on the 10th, where the steamer of the 3rd from Calcutta, after touching at Madras and immediate Pondicherry, is due on the 9th or 10th.

The steamer from Singapore, after a few hours' stay at Galle, will proceed on to the Red Sea, calling at Aden to coal, and arrive at Suez on the 25th to 27th.

It should be observed that the only fixed dates are those of sailing from Shanghai, Hong Kong, Calcutta, and Batavia; the dates of calling at intermediate stations are dependent on the weather, etc.

During the months of April, May, June, July, August, and September, the departures from Yokohama, Shanghai, and Hong Kong, will be advanced two days, unless the stated duration of stoppage would be expired. In case of delay in the arriving at Shanghai, Hong Kong, and Point de Galle on the return voyage from Yokohama, Shanghai and Calcutta, the greatest stoppage will be of three days after the stated date of departure.

The transit through Egypt is uniformly arranged for the outward and for the homeward journey.

One of the Company's steamers will await the homeward passengers at Alexandria, and leave there on the 27th to 29th, arriving at Marseilles after touching at Messina, on the 3rd to 5th of the month.

Mauritius and Réunion Line.

The Company's steamers leave Marseilles on the 9th of every month at 2 p.m., and after staying a few hours at Messina, arrive at Alexandria generally on the 15th, the official date being early on the 16th.

See regulations for transit through Egypt.

At Suez, another of the Company's steamers awaits the passengers, leaving generally on the 17th. This steamer calls at Aden, and at Mahé (Seychelles), except in June, July, and August.

From Seychelles this steamer proceeds on her voyage to Réunion, arriving there on about the 5th, and at Mauritius on the following day.

On the homeward voyage, the steamer leaves Mauritius on the 18th at 4 p.m., calls at Réunion on the 19th, and on the same day proceeds on her voyage, calling at Seychelles and Aden, and arriving at Suez on about the 7th.

The transit through Egypt is uniformly arranged for the outward and the homeward journey.

Another of the Company's steamers receives the homeward passengers at Alexandria, and leaves there on the 9th to 11th, arriving at Marseilles, after calling at Messina, on the 15th or 16th of the month.

STATEMENT of VOYAGES between Suez and Bombay performed by the Contract Mail Packets during the Years 1864 and 1865, corresponding with the Return, No. 3, Appendix, No. 1, page 214.

FROM SUEZ TO BOMBAY.					FROM BOMBAY TO SUEZ.						
Departure from Suez.		Stop at Aden.	Arrival at Bombay.		Duration of Voyage.	Departure from Bombay.		Stop at Aden.	Arrival at Suez.		Duration of Voyage.
1864.		<i>h. m.</i>	1864.		<i>Days. h. m.</i>	1864.		<i>D. h. m.</i>	1864.		<i>Days. h. m.</i>
29 Jan. -	9 40 p.m.	11 40	14 Feb.	3 20 p.m.	15 17 40	14 Jan.	10 35 a.m.	0 11 32	28 Jan.	6 58 a.m.	13 20
13 Feb. -	6 30 a.m.	11 0	1 Mar.	11 15 "	17 16 45	29 "	10 40 "	0 15 20	11 Feb.	10 0 "	12 23
1 March	4 50 p.m.	11 15	16 "	10 55 a.m.	14 18 5	14 Feb.	10 30 "	0 14 30	28 "	5 15 p.m.	14 "
14 "	7 15 "	10 30	28 "	6 0 "	13 10 45	29 "	10 25 "	0 11 55	13 Mar.	8 10 a.m.	12 21
29 "	6 15 "	9 0	12 April	midnight -	14 5 45	14 Mar.	10 30 "	1 10 30	28 "	0 30 p.m.	14 2
14 April	8 50 "	9 10	26 "	5 0 p.m.	12 4 10	29 "	11 20 "	0 9 10	10 April	5 0 a.m.	11 17
28 "	10 15 "	13 15	12 May	4 0 a.m.	13 5 45	14 April	10 30 "	0 9 15	27 "	11 15 p.m.	13 12
12 May -	6 25 "	8 15	25 "	6 20 p.m.	12 23 55	29 "	10 35 "	0 13 0	14 May	5 45 a.m.	14 19
28 "	8 0 a.m.	8 0	10 June	2 30 "	13 6 30	14 May	10 50 "	0 10 0	26 "	10 10 p.m.	12 11
12 June -	6 15 p.m.	9 50	26 "	3 40 a.m.	11 9 25	24 "	10 0 "	0 9 30	8 June	5 45 a.m.	14 19
27 "	7 0 "	6 15	11 July	11 45 "	11 16 45	9 June	10 30 "	0 18 55	30 "	6 55 "	20 20
13 July -	6 6 "	12 10	28 "	1 25 p.m.	12 19 19	24 "	11 35 "	0 8 30	13 July	4 40 "	17 17
27 "	0 20 "	8 12	8 Aug.	10 50 "	12 10 30	9 July	11 0 "	0 13 0	26 "	5 45 p.m.	17 6
12 Aug. -	8 10 "	8 12	24 "	4 15 "	11 20 5	24 "	10 35 "	0 9 0	11 Aug.	6 0 "	18 7
27 "	2 0 "	7 15	10 Sept.	2 30 a.m.	13 12 30	9 Aug.	11 15 "	0 13 55	28 "	2 40 a.m.	18 15
12 Sept. -	7 30 "	8 7	26 "	10 2 "	13 14 32	24 "	0 40 p.m.	0 9 0	9 Sept.	11 55 "	15 23
28 "	8 40 "	7 50	12 Oct.	8 40 p.m.	14 0 0	9 Sept.	0 45 "	3 0 0	2 Oct.	4 30 "	22 15
13 Oct. -	0 20 a.m.	13 0	30 "	8 30 "	17 20 10	29 "	1 20 "	0 7 5	11 "	6 50 p.m.	12 5
27 "	7 0 p.m.	7 5	9 Nov.	6 20 "	12 23 20	14 Oct.	11 0 a.m.	0 17 13	30 "	1 0 "	16 2
12 Nov. -	10 10 "	9 0	29 "	3 30 "	16 17 20	29 "	11 0 "	0 9 0	9 Nov.	2 30 "	11 3
29 "	0 30 a.m.	9 20	12 Dec.	1 25 a.m.	13 0 55	14 Nov.	10 43 "	0 8 57	26 "	4 0 "	12 5
12 Dec. -	6 40 p.m.	7 35	26 "	7 45 p.m.	14 1 5	29 "	10 20 "	1 19 30	16 Dec.	5 0 a.m.	16 18
1865.					1865.						
28 "	6 50 "	13 30	15 Jan.	4 30 "	17 21 40	29 "	noon -	0 8 50	10 Jan.	4 0 a.m.	11 16
1865.					1865.						
12 Jan. -	11 5 p.m.	11 45	29 "	1 20 p.m.	16 14 15	14 Jan.	10 48 a.m.	0 11 55	27 "	11 20 p.m.	13 12
29 "	9 25 a.m.	10 8	11 Feb.	10 50 "	13 13 25	29 "	1 0 p.m.	0 8 5	12 Feb.	9 30 a.m.	13 20
15 Feb. -	9 45 "	7 30	1 Mar.	7 0 "	14 9 15	29 "	11 30 a.m.	0 8 30	27 "	3 40 p.m.	13 4
28 "	10 30 "	6 10	14 "	6 0 "	14 7 30	11 Feb.	11 10 "	0 10 30	16 Mar.	2 0 a.m.	14 14
14 March	9 0 "	9 10	28 "	11 10 a.m.	14 2 10	1 Mar.	11 0 "	0 10 40	26 "	1 15 p.m.	12 2
28 "	6 20 "	7 50	12 April	midnight -	15 17 40	14 "	noon -	0 10 45	12 April	11 40 "	14 11
13 April	5 0 "	9 10	25 "	7 20 p.m.	12 14 20	29 "	10 50 a.m.	0 8 5	28 "	1 40 a.m.	13 14
27 "	midnight -	5 30	11 May	10 0 a.m.	13 10 0	14 April	11 30 "	0 8 55	15 May	2 0 p.m.	16 2
13 May -	0 50 a.m.	6 5	27 "	11 20 "	14 10 30	29 "	10 30 "	0 10 30	27 "	0 30 a.m.	12 14
27 "	0 40 "	9 0	8 June	5 0 p.m.	12 16 20	14 May	10 45 "	0 21 45	8 June	5 30 "	14 18
12 June -	3 0 "	7 20	24 "	3 54 a.m.	12 0 54	24 "	9 June	0 20 50	26 "	2 8 p.m.	16 21
28 "	6 40 "	8 2	11 July	0 15 "	12 17 35	9 July	10 45 a.m.	0 15 22	26 July	1 0 "	17 2
13 July -	10 40 "	7 20	24 "	3 0 p.m.	11 4 20	24 "	11 30 "	0 8 0	28 "	11 30 "	16 8
27 "	midnight -	9 30	8 Aug.	6 0 a.m.	11 6 0	12 "	5 45 "	0 12 10	12 Aug.	10 52 "	19 5
13 Aug. -	3 30 a.m.	7 15	24 "	5 45 p.m.	14 15 24	24 "	5 10 "	0 13 15	26 "	2 20 a.m.	16 9
28 "	7 7 "	7 16	11 Sept.	3 50 a.m.	13 20 43	9 Aug.	10 20 a.m.	1 0 50	17 Sept.	5 0 "	22 18
15 Sept. -	0 20 "	15 10	27 "	1 30 "	12 1 10	25 "	5 30 p.m.	0 13 0	30 "	9 0 "	20 15
27 "	7 10 p.m.	7 40	13 Oct.	6 0 p.m.	15 22 50	9 Sept.	10 25 a.m.	0 9 5	12 Oct.	8 15 p.m.	12 9
13 Oct. -	6 30 "	10 45	29 "	11 55 "	16 5 25	30 "	9 45 "	0 10 10	28 "	1 10 a.m.	12 15
27 "	11 35 "	7 30	9 Nov.	7 10 a.m.	12 7 35	15 Oct.	11 30 "	0 9 30	13 Nov.	2 0 "	14 14
13 Nov. -	11 20 "	16 0	30 "	4 30 "	16 5 10	29 "	noon -	0 7 30	26 "	8 30 "	11 20
28 "	6 40 a.m.	7 40	14 Dec.	10 25 p.m.	16 15 45	14 Nov.	noon -	0 9 15	12 Dec.	11 35 p.m.	13 11
15 Dec. -	6 50 p.m.	7 5	29 "	2 0 "	13 19 10	29 "	11 55 a.m.	0 22 55	28 "	4 30 "	14 4
1866.					1866.						
30 "	8 50 a.m.	5 50	13 Jan.	5 5 "	14 8 15	29 "	11 55 a.m.	0 11 52	11 Jan.	2 18 a.m.	12 14
1866.					1866.						
13 Jan. -	6 0 "	13 0	28 "	4 20 a.m.	14 22 20						

SUMMARY.				SUMMARY.			
Average length of Voyage from Suez to Bombay, inclusive of stoppage at Aden -				Average length of Voyage from Bombay to Suez, inclusive of stoppage at Aden -			
Average stoppage at Aden -				Average length of stoppage at Aden -			
Average length of Voyage from Suez to Bombay, exclusive of stoppage at Aden -				Average length of Voyage from Bombay to Suez, exclusive of stoppage at Aden -			
Contract time of 10 knots an hour reduced to an estimated equivalent (*after allowing for deviations from straight lines) in days and hours, exclusive of stoppage at Aden -				Contract time of 10 knots an hour reduced to an estimated equivalent (*after allowing for deviations from straight lines) in days and hours, exclusive of stoppage at Aden -			
* The difference is 5 per cent. making the required rate of sailing, reckoned in straight lines, 9½ knots an hour.				* The difference is 5 per cent., making the required rate of sailing, reckoned in straight lines, 9½ knots an hour.			

GENERAL SUMMARY OF THE FOREGOING STATEMENTS.

Average length of passage between Suez and Bombay, inclusive of stoppage at Aden -				<i>Days. h. m.</i>
Average length of stoppage at Aden -				14 11 8
Average length of passage between Suez and Bombay, exclusive of stoppage at Aden -				0 11 25
Contract time of 10 knots an hour reduced to an estimated equivalent (*after allowing for deviations from straight lines) in days and hours, exclusive of stoppage at Aden -				13 23 53
* The difference is 5 per cent., making the required rate of sailing, reckoned in a straight line, 9½ knots an hour.				14 2 0

Appendix, No. 9.

PAPERS handed in by Mr. *Howell*, 24 April 1866.

App. No. 9.

MILEAGE TABLE of the Services performed by the Peninsular and Oriental Company,
under their India and China Contracts, during the Year 1865.

	Voyages.	Miles each.	Miles.	Miles.	TOTAL Mileage.
<i>Calcutta and China Line:</i>					
Southampton and Alexandria -	48	2,951	141,648		
Marseilles and Alexandria -	48	1,478	70,944		
Suez and Point de Galle -	48	3,442	165,216		
TOTAL to and from } Point de Galle }	-	-	-	377,808	
Point de Galle and Calcutta -	48	1,315	63,120		
Bombay and Shanghai -	48	4,742	227,616		
				290,736	668,544
<i>Bombay Line:</i>					
Southampton and Alexandria -	48	2,951	141,648		
Marseilles and Alexandria -	48	1,478	70,944		
Suez and Bombay -	48	2,972	142,656		
				-	355,248
TOTAL - - -					1,023,792

	Miles.
Present mileage - - - - -	1,023,792
Under suggested arrangement. - - - - -	1,147,900
Additional mileage under the proposed arrangement - - - - -	124,108 per annum.

Pro formâ MILEAGE TABLE of a Weekly Mail to India, *viâ* Bombay, and a Fortnightly
Mail to China from Suez.

<i>India Line:</i>						Miles.	Miles.
Southampton and Alexandria -	-	-	-	-	-	2,951	
Marseilles and Alexandria -	-	-	-	-	-	1,478	
Suez and Bombay -	-	-	-	-	-	2,972	
						7,401	
104 voyages -	-	-	-	-	-	-	769,704
<i>China Line:</i>							
Suez and Shanghai -	-	-	-	-	-	7,273	
52 voyages -	-	-	-	-	-	-	378,196
TOTAL - - -							1,147,900

Pro formâ MILEAGE TABLE of a Weekly Mail to India, *viâ* Bombay, and a Weekly
Mail to China, *viâ* Bombay and Calcutta alternately.

<i>India Line:</i>										<i>Miles.</i>
Southampton	}	and Bombay, 104 voyages	-	-	-	-	-	-	-	769,704
and Marseilles										
<i>China Line:</i>										<i>Miles.</i>
Bombay and Shanghai	-	-	-	-	-	-	-	-	-	4,742
Calcutta and Shanghai	-	-	-	-	-	-	-	-	-	3,887
52 voyages	-	-	-	-	-	-	at	8,629	=	448,708
TOTAL										- - - 1,218,412

App. No. 9.

STATEMENT showing the Rate of Passage Money per Mile by the Steamers of the Peninsular and Oriental Steam Company, including First Class Victualling, Wines, Spirits, &c.

	Distance.	Passage.	Mileage Rate.
	<i>Miles.</i>	<i>£.</i>	<i>d.</i>
Southampton to Alexandria - - - -	2,701	30	2½ and fraction over, ($\frac{1}{8}$).
Ditto - - Bombay - - - -	5,937	85	3½ and fraction under, ($\frac{1}{16}$).
Ditto - - Calcutta - - - -	7,722	95	3 and fraction under, ($\frac{1}{16}$).
Ditto - - Hong Kong - - - -	9,438	120	3 and fraction over, ($\frac{25}{100}$).
Ditto - - Sydney - - - -	12,631	120	2½ and fraction under, ($\frac{1}{28}$).

Rate of chief cabin fare by British and North American Royal Mail Ships from Liverpool to New York, 3,068 miles, 26 L.; first class victualling (exclusive of wines, spirits, &c.) 2 d. and a fraction per mile.

RATES of Passage Money.

FROM MARSEILLES TO - - -		Aden.	Bombay.	Ceylon.	Madras.	Calcutta.	Penang.	Singapore.
		£.	£.	£.	£.	£.	£.	£.
Gentlemen or ladies travelling singly, and occupying one berth in a general cabin - -	Per Peninsular and Oriental Company's Steamers.	50	80	80	85	90	90	95
	Per Messageries Steamers -	50	0	80	85	90	0	95
Married couples occupying a reserved cabin - - -	Per Peninsular and Oriental Company's Steamers.	170	210	210	220	240	240	260
	Per Messageries Steamers -	170	0	210	220	240	0	260
Children with parents, 3 years and under 10, each - - -	Per Peninsular and Oriental Company's Steamers.	25	40	40	43	45	45	48
	Per Messageries Steamers -	25	0	40	43	45	0	48
One child under 3 years, no berth provided - - - -	Per Peninsular and Oriental Company's Steamers.	free	free	free	free	free	free	free
	Per Messageries Steamers -	free	0	free	free	free	0	free
European servants - - -	Per Peninsular and Oriental Company's Steamers.	30	48	48	50	53	53	55
	Per Messageries Steamers -	30	0	48	50	53	0	55

FROM MARSEILLES TO - - -		Hong Kong.	Shanghai.	Yokohama.	Seychelles.	Mauritius.	Australia.
		£.	£.	£.	£.	£.	£.
Gentlemen or ladies travelling singly, and occupying one berth in a general cabin - -	Per Peninsular and Oriental Company's Steamers.	115	125	145	75	80	115
	Per Messageries Steamers -	115	125	154	0	80	0
Married couples occupying a reserved cabin - - -	Per Peninsular and Oriental Company's Steamers.	290	320	360	190	210	290
	Per Messageries Steamers -	290	320	384	0	210	0
Children with parents, 3 years and under 10, each - - -	Per Peninsular and Oriental Company's Steamers.	58	63	73	38	40	58
	Per Messageries Steamers -	58	63	77	0	40	0
One child under 3 years, no berth provided - - - -	Per Peninsular and Oriental Company's Steamers.	free	free	free	free	free	free.
	Per Messageries Steamers -	free	free	free	0	free	0
European servants - - -	Per Peninsular and Oriental Company's Steamers.	63	73	83	43	48	73
	Per Messageries Steamers -	63	73	92	0	65	0

Marked thus 0 signifies that there is no communication.

RETURN of the Number of First Class Passengers conveyed to and from India and China by the Steam Ships of the Peninsular and Oriental Company during the Year 1865, distinguishing Officers of the Army and Navy and Government Officials from other Passengers.

OUTWARDS.						HOMEWARDS.					
Officers of the Army.	Officers of the Navy.	Civil Servants.	Ordinary Passengers.	Children.	TOTAL.	Officers of the Army.	Officers of the Navy.	Civil Servants.	Ordinary Passengers.	Children.	TOTAL.
* 84	* 45	* 12	† 2,696	† 54	2,891	* 23	* 48	* 13	† 2,012	† 352	2,448

* The passages for these officers were ordered and paid for by the Government to the Company.

† These passengers paid their passage money direct to the Company, but the number doubtless includes many army, navy, and civil servants who received an allowance from the Government.

AVERAGE PERFORMANCES of the Cunard Mail Steamers for 1859, 1860, and 1861, as shown by a Parliamentary Return, dated 31st March 1862.

Since the steamers have called at Queenstown, the passages are taken between that port and America only.

1859.

26 Voyages, Liverpool to New York.

Distance - - - - - 3,012 miles $\times$ 26 = 78,312 miles.

Total time - - - - - 8,115 hours.

Average speed - - - - - 9 k. 5 frns.

1860.

6 Voyages, Liverpool to New York.

Distance - - - - - 3,012 miles $\times$ 6 = 18,072 miles.

20 Voyages, Queenstown to New York.

Distance - - - - - 2,780 miles $\times$ 20 = 55,600 „

TOTAL - - - - - 73,672 „

Total time - - - - - 7,317 hours.

Average speed - - - - - 10 k. $\frac{1}{2}$ frn.

1861.

25 Voyages, Queenstown to New York.
(one short, broke down.)

Distance - - - - - 2,780 miles $\times$ 25 = 69,500 miles.

Total time - - - - - 6,754 hours.

Average speed - - - - - 10 k. 2 frns. (full.)

1859.

26 Voyages, New York to Liverpool.

Distance - - - - - 3,012 miles $\times$ 26 = 78,312 miles.

Total time - - - - - 6,863 hours.

Average speed - - - - - 11 k. 3 frns.

1860.

8 Voyages, New York to Liverpool.

Distance - - - - - 3,012 miles $\times$ 8 = 24,096 miles.

18 Voyages, New York to Queenstown.

Distance - - - - - 2,780 miles $\times$ 18 = 50,040 „

TOTAL - - - - - 74,136 „

Total time - - - - - 6,581 hours.

Average speed - - - - - 11 k. 2 frns.

1861.

26 Voyages, New York to Queenstown.

Distance - - - - - 2,780 miles $\times$ 26 = 72,280 miles.

Total time - - - - - 6,483 hours.

Average speed - - - - - 11 k. 1 frn.

	Total Miles.	Total Hours.	Average Speed
			k. frns.
Out 1859, 1860, and 1861 - - -	221,484	22,186	10 0
Home „ „ „ - - -	224,728	19,927	11 2
GRAND TOTAL - - -	446,212	42,113	

Average speed of the whole, 10 k. 5 frns.

App. No. 9.

Boston Line.

1859.

22 Voyages, Liverpool to Boston.

Distance - - - - - 2,875 miles $\times$ 22 = 63,250 miles.

4 Voyages, Queenstown to Boston.

Distance - - - - - 2,649 miles $\times$ 4 = 10,596 „

TOTAL - - - 73,846 „

Total time - - - - - 8,152 hours.

Average speed - - - - - 9 knots.

1860.

27 Voyages, Queenstown to Boston.

Distance - - - - - 2,649 miles $\times$ 27 = 71,523.

Total time - - - - - 7,876 hours.

Average speed - - - - - 9 k. 1 fn.

1861.

26 Voyages, Queenstown to Boston.

Distance - - - - - 2,649 miles $\times$ 26 = 68,874 miles.

Total time - - - - - 7,244 hours.

Average speed - - - - - 9 k. 4 frns.

1859.

23 Voyages, Boston to Liverpool.

Distance - - - - - 2,875 miles $\times$ 23 = 66,125 miles.

3 Voyages, Boston to Queenstown.

Distance - - - - - 2,649 miles $\times$ 3 = 7,947 „

TOTAL - - - 74,072 „

Total time - - - - - 6,892 hours.

Average speed - - - - - 10 k. 6 frns.

1860.

26 Voyages, Boston to Queenstown.

Distance - - - - - 2,649 miles $\times$ 26 = 68,874 miles.

Total time - - - - - 6,546 hours.

Average speed - - - - - 10 k. 4 frns.

1861.

26 Voyages, Boston to Queenstown.

Distance - - - - - 2,649 miles $\times$ 26 = 68,874 miles.

Total time - - - - - 6,678 hours.

Average speed - - - - - 10 k. 3 frns.

	Total Miles.	Total Hours.	Average Speed.
Out, 1859, 1860, 1861 - - - - -	214,243	23,272	<i>K. frns.</i> 9 2
Home „ „ „ - - - - -	211,820	20,116	10 4
GRAND TOTAL - - - - -	426,063	43,388	

Average speed of the whole - - - - - 9 k. 7 frns.

Note.—In all cases the stay at Halifax is deducted from the hours under weigh.

RETURN exhibiting the Result of the Transfer of Steam Vessels from the Mediterranean to the Indian Seas, with regard to the Consumption of Fuel and Speed.

Ships.	Increase in Consumption of Fuel per Mile.			Decrease of Speed per Hour.	
	Cwt.	qrs.	lbs.	K.	f.
Mooltan - - - -	1	0	8	0	1= $\frac{1}{8}$ of a knot.
Ellora - - - -	0	3	25	0	4= $\frac{1}{2}$ „
Baroda - - - -	0	2	17	0	6= $\frac{3}{4}$ „
Delhi - - - -	0	3	12	0	6= $\frac{3}{4}$ „

NEW SHIPS added to the Fleet of the Peninsular and Oriental Steam Navigation Company, from January 1859 to present Date.

		Tons.	Horse Power.			Tons.	Horse Power.
Nepaul - -		796	200	Rangoon - -		1,776	400
Delta - -		1,618	400	Delhi - -		1,898	400
Massilia - -		1,640	400	Syria - -		1,932	450
Weddo - -		1,632	450	Corea - -		609	200
Orissa - -		1,646	300	Nyanza - -		2,082	450
Behar - -		1,603	300	Mongolia - -		2,798	500
Mooltan - -		2,257	400	Geelong - -		1,500	250
China - -		2,010	400	Tanjore - -		1,971	400
Ellora - -		1,574	300	Nippon - -		694	140
Emu - -		1,538	300	Surat - -		2,666	500
Columbian - -		2,352	500	Avoca - -		1,284	250
Baroda - -		1,874	400	Malacca - -		1,700	300
Golconda - -		1,909	400	Simla - -		1,700	300
Poonah - -		2,152	500				
Carnatic - -		1,775	400	28 Ships - -		48,986	10,190

TOTAL Cost, say - - - £.2,144,000.

App. No. 9.

MEMORANDA of Mails conveyed from Southampton during the year 1864.

Date.	SHIP.				Number of Packages.	Weight.				Measurement.		
1864:						Tons cwt. qrs. lbs.				Tons ft. in.		
January - 4	Pera	-	-	-	176	7	7	0	18	16	8	6
12	Syria	-	-	-	134	5	13	1	4	12	28	0
20	Ripon	-	-	-	1,090	44	18	2	8	96	14	0
27	Poonah	-	-	-	106	4	9	2	8	10	1	4
February - 4	Ceylon	-	-	-	190	7	19	2	16	17	28	4
12	Ellora	-	-	-	138	5	16	2	8	13	2	0
20	Pera	-	-	-	1,075	44	6	1	0	95	1	6
27	Delhi	-	-	-	115	4	16	3	24	10	32	10
March - 4	Ripon	-	-	-	170	7	2	2	0	15	29	8
12	Syria	-	-	-	76	3	16	0	0	10	30	8
20	Baroda	-	-	-	931	38	7	3	4	82	15	4
27	Ellora	-	-	-	57	2	17	0	0	8	3	0
April - 4	Ceylon	-	-	-	177	7	8	2	12	16	18	6
12	Delta	-	-	-	81	4	1	0	0	11	19	0
20	Delhi	-	-	-	1,117	46	0	3	20	96	30	8
27	Poonah	-	-	-	63	3	3	0	0	8	37	0
May - 4	Syria	-	-	-	195	8	3	0	4	17	37	2
12	Baroda	-	-	-	78	3	18	0	0	11	2	0
20	Ceylon	-	-	-	1,028	42	7	1	4	90	32	8
27	Ellora	-	-	-	66	3	6	0	0	9	14	0
June - 4	Delta	-	-	-	197	8	5	0	4	18	8	6
12	Delhi	-	-	-	85	4	5	0	0	12	1	8
20	Poonah	-	-	-	938	38	13	1	12	82	37	8
27	Ripon	-	-	-	58	2	18	0	0	8	8	8
July - 4	Baroda	-	-	-	169	7	2	0	24	15	32	8
12	Massilia	-	-	-	76	3	16	0	0	10	30	8
20	Ceylon	-	-	-	985	40	12	0	16	87	4	4
27	Syria	-	-	-	61	3	1	0	0	8	25	8
August - 4	Poonah	-	-	-	201	8	8	0	16	18	20	4
12	Ellora	-	-	-	85	4	5	0	0	12	1	8
20	Delta	-	-	-	1,028	42	7	1	24	90	34	10
27	Delhi	-	-	-	67	3	7	0	0	9	19	5
September - 4	Massilia	-	-	-	177	7	9	1	8	16	27	2
12	Ripon	-	-	-	80	4	0	0	0	11	13	4
20	Poonah	-	-	-	1,002	41	6	0	12	88	23	10
27	Syria	-	-	-	66	3	6	0	0	9	14	0
October - 4	Baroda	-	-	-	202	8	8	3	4	18	21	8
12	Ellora	-	-	-	84	4	4	0	0	11	36	0
20	Ceylon	-	-	-	1,036	42	14	0	24	91	25	0
27	Massilia	-	-	-	66	3	6	0	0	9	14	0
November - 4	Delta	-	-	-	194	8	2	2	8	17	38	0
12	Syria	-	-	-	93	4	13	0	0	13	7	0
20	Delhi	-	-	-	966	39	18	2	20	86	3	10
27	Ripon	-	-	-	61	3	1	0	0	8	25	0
December - 4	Massilia	-	-	-	150	6	9	0	12	14	36	6
12	Nyanza	-	-	-	88	4	8	0	0	12	18	8
20	Ceylon	-	-	-	1,015	42	2	0	36	91	16	6
27	Ellora	-	-	-	66	3	6	0	0	9	14	0
TOTAL - - -					16,559	689	14	2	14	1,539	26	9

MEMORANDA of Mails conveyed from Southampton during the Year 1865.

Date.	SHIP.	Number of Packages.	Weight.	Measurement.
1865:			<i>Tons cwt. qrs. lbs.</i>	<i>Tons ft. in.</i>
January - 4	Delhi - - - -	189	8 2 0 24	18 26 0
12	Syria - - - -	93	4 13 0 0	13 7 0
20	Poonah - - - -	1,098	45 11 2 8	99 0 0
27	Ripon - - - -	73	3 13 0 0	10 13 8
February - 4	Pera - - - -	191	8 3 3 12	18 33 0
12	Massalia - - - -	85	4 5 0 0	12 1 8
20	Delta - - - -	950	39 8 3 20	85 29 0
27	Nyanza - - - -	67	3 7 0 0	9 19 8
March - 4	Ellora - - - -	169	6 4 2 24	16 23 0
12	Euxine - - - -	90	4 10 0 0	12 30 0
20	Ceylon - - - -	996	41 7 1 20	96 38 8
27	Poonah - - - -	66	3 6 0 0	9 14 0
April - 4	Delhi - - - -	185	7 18 2 8	18 7 8
12	Ripon - - - -	93	4 13 0 0	13 7 0
20	Pera - - - -	1,049	43 10 0 8	94 13 4
27	Massilia - - - -	73	3 13 0 0	10 13 8
May - 4	Nyanza - - - -	202	8 12 3 16	19 31 6
12	Delta - - - -	93	4 13 0 0	13 7 0
20	Syria - - - -	1,151	47 15 2 16	103 32 0
27	Delhi - - - -	70	3 10 0 0	9 36 8
June - 4	Ellora - - - -	183	7 16 2 8	17 36 4
12	Ceylon - - - -	89	4 9 0 0	12 24 4
20	Poonah - - - -	1,063	43 16 1 16	93 39 6
27	Ripon - - - -	108	4 11 1 16	10 1 4
July - 4	Pera - - - -	193	8 1 0 4	17 25 10
12	Euxine - - - -	141	5 19 0 4	13 12 6
20	Massilia - - - -	1,095	45 2 2 0	96 29 4
27	Syria - - - -	101	4 5 1 4	9 21 8
August - 4	Nyanza - - - -	200	8 7 2 0	18 19 0
12	Delta - - - -	145	6 1 3 24	13 22 2
20	Ceylon - - - -	1,101	45 7 1 0	97 7 8
27	Poonah - - - -	105	4 8 1 16	9 33 6
September 4	Ripon - - - -	199	8 4 0 20	17 25 2
12	Tanjore - - - -	141	5 16 2 4	12 22 2
20	Mongolia - - - -	1,099	45 3 1 24	96 15 2
27	Pera - - - -	98	4 2 1 24	9 6 10
October - 4	Delta - - - -	189	7 17 2 8	17 9 8
12	Nyanza - - - -	130	5 8 3 20	12 1 0
20	Syria - - - -	1,113	45 16 3 0	98 5 10
27	Massilia - - - -	114	4 15 3 4	10 25 0
November 4	Poonah - - - -	220	9 3 1 6	20 2 4
12	Ripon - - - -	147	6 3 1 0	13 24 10
20	Tanjore - - - -	1,207	49 13 3 4	106 12 8
27	Mongolia - - - -	105	4 8 1 16	9 33 6
December 4	Pera - - - -	194	8 2 0 4	17 22 4
12	Delta - - - -	141	5 18 2 0	13 6 0
20	Nyanza - - - -	1,131	46 11 1 12	99 26 8
27	Syria - - - -	104	4 7 0 24	9 25 8
TOTAL - - -		17,839	746 18 2 26	1,660 2 6

CONVENTION.

MANDONS et ordonnons que les présentes, revêtues du sceau de l'État et insérées au Bulletin des lois, soient adressées aux cours, aux tribunaux et aux autorités administratives, pour qu'ils les inscrivent sur leurs registres, les observent et les fassent observer, et notre ministre secrétaire d'État au département de la justice est chargé d'en surveiller la publication.

Fait au Palais des Tuileries, le 3 Juillet 1861.

Vu et scellé du grand sceau :

Le Garde des sceaux, Ministre
Secrétaire d'État au Département de la Justice,

Signé *Delangle*.

Signé *Napoléon*.

Par l'Empereur :

Le Ministre d'État,
Signé *A. Walewski*.

Convention entre le Ministre des Finances et la Compagnie des Services Maritimes des Messageries Impériales, pour l'exécution du Service Postal de l'Indo-Chine.

Entre Son Excellence le ministre des finances et la compagnie des services maritimes des messageries impériales, représentée par M. Armand Béhic, président du conseil d'administration, dûment autorisé par le délibération de ce conseil, en date du 21 Mars 1861.

Il a été convenu ce qui suit :

Art. 1^{er}. La compagnie des services maritimes de messageries impériales, après avoir pris connaissance du cahier des charges annexé à la présente convention.

S'engage à desservir pendant vingt-quatre ans les lignes postales d'Indo-Chine, conformément aux clauses et conditions du cahier des charges précité et à celles ci-dessous, et ce, moyennant le paiement d'une subvention annuelle moyenne de six millions de francs (6,000,000^f).

Son Excellence le ministre des finances accepte, au nom de l'État, l'engagement contracté par la compagnie et lui garantit le paiement de la subvention stipulée ci-dessus.

2. Pour constituer l'annuité moyenne de six millions de francs, la quotité de la subvention afférente à chacune des vingt-quatre années de concession est fixé ainsi qu'il suit :

Pendant les trois premières années	- - - - -	7,500,000 ^f
Pendant les trois années suivantes	- - - - -	7,000,000
Pendant les trois années suivantes	- - - - -	6,500,000
Pendant les trois années suivantes	- - - - -	6,000,000
Pendant les six années suivantes	- - - - -	5,500,000
Pendant les six dernières années	- - - - -	5,000,000

Pour indemniser la compagnie des frais d'envoi des navires dans les mers de l'Indo-Chine, il lui sera alloué une somme de un million huit cent soixante et quinze mille francs, une fois payée, représentant trois mois de la subvention annuelle stipulée au paragraphe précédent, pour la première période d'exploitation.

Cette allocation sera payée à la compagnie dans les six mois qui suivront l'inauguration de la ligne principale de Suez à Saïgon.

3. Si par suite de circonstances de guerre ou d'événements imprévus ayant un caractère général et public, le fret des navires charbonniers ou le taux de l'assurance maritime, dans les mers de l'Indo-Chine, venait à éprouver une hausse considérable et de nature à rendre insuffisant le concours de l'État, il pourrait être alloué à la compagnie une indemnité qui serait réglée par décret, le Conseil d'État entendu.

4. L'État avancera à la compagnie une somme de douze millions, payable par tiers à la fin de chacune des trois années qui précéderont la date fixée par le cahier des charges pour l'ouverture des services complets.

Cette avance, augmentée des intérêts à cinq pour cent l'an, afférents aux sommes versées pendant ladite période préliminaire, formera la dette de la compagnie envers l'État.

Cette dette ne sera pas productive d'intérêts. Elle sera remboursée par la compagnie en douze annuités de un million cinquante mille huit cent trente-trois francs trente-trois centimes (1,050,833^f 33^c) chacune, dont la première sera exigible un an après l'ouverture des services complets.

A défaut de paiement par la compagnie des annuités échues, elles seront prélevées, sans qu'il soit besoin de mise en demeure, sur le montant des subventions à payer par l'État.

Le matériel naval servant à l'exploitation des lignes de l'Indo-Chine sera affecté à la garantie de la dette qui fait l'objet du présent article. Le ministre des finances prendra à cet effet les mesures qu'il jugera convenables pour sauvegarder les droits de l'État, à raison des fonds par lui versés.

Cette garantie sera resreinte au fur et à mesure et à proportion des remboursements effectués par la compagnie.

5. Les contrats de concession relatifs aux services postaux de la Méditerranée et de la mer Noire, à l'exception des lignes d'Italie et de l'Algérie, sont prorogés jusqu'au terme de la concession du service du Brésil faite à la compagnie en vertu de la loi du 17 Juin 1857.

Pendant la période de prorogation, la compagnie aura droit à une subvention annuelle égale à celle dont elle aura joui pendant l'année 1871, déduction faite de la part de subvention afférente aux parcours des lignes d'Italie, et en tenant compte, sur les bases posées par l'article 6 ci-après, des modifications d'itinéraire qui auraient pu être introduites en vertu dudit article. Cette subvention sera fixe, sauf les modifications résultant des remaniements d'itinéraire qui pourraient avoir lieu ultérieurement, en vertu de la faculté ouverte au Gouvernement par le même article.

En considération de cette prorogation, la compagnie s'engage :

1° A comprendre sans augmentation de subvention, dans les itinéraires réglementaires à exploiter jusqu'au 9 Septembre 1871, une ligne directe hebdomadaire de Marseille à Naples par Civita-Vecchia :

2° A établir aussi, sans augmentation de subvention pendant toute la durée du contrat de concession relatif à l'Indo-Chine, une ligne mensuelle de Marseille à Alexandrie, en communication directe avec les lignes de l'Indo-Chine.

Le département des finances, sur la proposition de la compagnie, réglera l'itinéraire à observer sur cette ligne, dont l'exploitation demeurera d'ailleurs soumise à toutes les obligations résultant du cahier des charges ci-annexé.

6. Le Gouvernement se réserve faculté, la compagnie entendue, de supprimer à toute époque, dans les itinéraires de la Méditerranée et de la mer Noire (y compris les lignes d'Italie et à l'exception de celles d'Algérie), ceux des services qui pourraient être devenus inutiles tant au point de vue postal qu'au point de vue commercial.

Le Gouvernement se réserve également la faculté d'appliquer, la compagnie entendue, tout ou partie de la portion de subvention afférente aux services supprimés, à des parcours à accomplir dans les mêmes mers et sur d'autres points.

Il sera tenu compte, pour le remaniement des itinéraires et pour le règlement des subventions, du nombre des lieues marines supprimées et à parcourir à nouveau, ainsi que de la puissance des navires effectés à l'ancien service et à affecter au nouveau.

Pour servir de base à ce calcul, la subvention moyenne dont la compagnie est appelée à jouir jusqu'à l'expiration des contrats relatifs aux services de la Méditerranée et de la mer Noire, est fixée à vingt et un francs trois centimes par lieue marine parcourue, correspondant à un échantillon moyen de navires de deux cent quarante chevaux.

L'échantillon des navires sur les lignes à supprimer sera établi en prenant la moyenne des bâtiments employés par la compagnie sur ces lignes pendant les six années qui auront précédé la date de la suppression.

L'échantillon des navires à employer sur les lignes à établir à nouveau sera déterminé par le ministre des finances, la compagnie entendue, en tenant compte des nécessités postales et commerciales du service à accomplir.

Si le ministre des finances ne jugeait pas à propos de remplacer les parcours supprimés, la subvention serait diminuée proportionnellement à ces parcours, et la compagnie aurait droit, s'il y avait lieu, à une indemnité qui sera réglée suivant les procédés prévus à l'article 45 du cahier des charges.

7. A l'expiration de la douzième année d'exploitation du service de l'Indo-Chine, et sous réserve de prévenir la compagnie, au moins un an à l'avance, l'État aura droit de résilier les concessions faites à la compagnie dans la Méditerranée, dans la mer Noire et dans les mers de l'Indo-Chine.

Si l'État n'a pas usé de cette faculté à la date ci-dessus indiquée, la présente convention sortira son plein et entier effet.

En cas de résiliation, l'État devrait, sur la demande de la compagnie, reprendre le matériel naval affecté au service de l'Indo-Chine. Il rachèterait, en outre, le combustible et les approvisionnements de toute espèce, formés au delà du Cap pour l'usage des ateliers et de la navigation de la compagnie, et enfin les établissements à terre spécialement créés pour ce service.

L'obligation de rachat ne s'appliquera ni au matériel naval, ni aux établissements existants dans la Méditerranée et dans la mer Noire, ni aux approvisionnements créés par la compagnie pour le service de ces mers.

En cas de reprise par l'État des objets énumérés dans le présent article, l'estimation en sera faite par voie d'expertise, suivant les formes déterminées par l'article 45 du cahier des charges.

La valeur des navires repris sera estimée non-seulement en considération de leur valeur intrinsèque comme instruments de navigation, mais en tenant compte de leur valeur comme instruments d'exploitation commerciale.

Le montant de l'expertise sera payé à la compagnie dans les six mois qui suivront la reprise par l'État du matériel des approvisionnements et des établissements.

8. La compagnie aura la faculté d'exploiter ses ateliers au delà du Cap et de les mettre à la disposition, soit du public, soit de la marine de l'État.

9. La compagnie est dispensée de l'exécution de la seconde ligne du Brésil et de la Plata partant de Marseille.

Les clauses de la convention du 16 Septembre 1857 et du cahier des charges, y annexé, relatives à cette seconde ligne, sont et demeurent annulées.

App. No. 9.

La subvention accordée à la compagnie par la convention du 16 Septembre 1857 est réduite de la somme de deux millions trois cent quatre-vingt-treize mille huit cent vingt-huit francs.

10. La présente convention et les actes qui s'y rapportent seront enregistrés au droit fixe d'un franc.

11. La présente convention ne sera valable qu'après que ses stipulations financières auront été sanctionnées par la loi, et qu'elle aura été approuvée par un décret impérial.

Cahier des Charges pour l'Exploitation du Service Postal de l'Indo-Chine.

CHAPITRE PREMIER.

Itinéraire.

Art. 1^{er}. Le service à exécuter comprend une ligne principale et cinq services annexes indiqués ci-après.

L'itinéraire de la ligne principale partant une fois par mois de Suez, en communication avec les services de la Méditerranée par Alexandrie, et aboutissant à Saïgon, est fixé ainsi qu'il suit :

De Suez à Aden - - - - -	436 lieues marines.
D'Aden à Pointe-de-Galles - - - - -	711 2/3
De Pointe-de-Galles à Penang - - - - -	404 1/3
De Penang à Singapore - - - - -	127
De Singapore à Saïgon - - - - -	212 1/3
	1,891 1/3

(Douze voyageurs aller et retour par an : parcours annuel quarante-cinq mille trois cent quatre-vingt-quatre lieues marines.)

Cinq services annexes seront établis avec les itinéraires suivants :

1°. D'Aden à la Réunion et Maurice, huit cent vingt-cinq lieues marines.

(Douze voyages par an : parcours annuel dix-neuf mille huit cents lieues marines.)

2°. De Pointe-de-Galles à Calcutta et Chandernagor, savoir :

De Pointe-de-Galles à Pondichéry - - - - -	163 1/3 lieues marines.
De Pondichéry à Madras - - - - -	30
De Madras à Calcutta et à Chandernagor - - - - -	256 2/3
	450

(Douze voyages par an : parcours annuel dix-neuf mille huit cents lieues marines.)

3°. De Saïgon à Batavia, cent quatre-vingt-trois lieues marines un tiers.

(Douze voyages par an : parcours annuel quatre mille quatre cents lieues marines.)

4°. De Saïgon à Manille, trois cent deux lieues marines deux tiers.

(Douze voyages par an : parcours annuel sept mille deux cent soixante-quatre lieues marines.)

5°. De Saïgon à Shang-Haï, savoir :

De Saïgon à Hong-Kong - - - - -	305 lieues marines.
De Hong-Kong à Shang-Haï - - - - -	266 2/3
	571 2/3

(Douze voyages par an : parcours annuel treize mille sept cent vingt lieues marines.)

La distance à parcourir annuellement sur la ligne principale et les annexes est de cent un mille trois cent soixante-huit lieues marines.

Le ministre aura la faculté de supprimer des escales ou d'en établir de nouvelles, d'augmenter le nombre des ordinaires sur les lignes ci-dessus mentionnées, ou bien encore d'établir des services nouveaux.

Dans ces divers cas, le nombre des bâtiments et les conditions du marché seront fixés de nouveau et de gré à gré.

2. L'État s'interdit la faculté de subventionner tout service particulier d'un port de France quelconque ou de Suez sur les points déjà desservis par la compagnie.

Cette interdiction ne s'applique néanmoins ni au prolongement des lignes desservies par la compagnie, ni à leur rayonnement.

Dans le cas où le Gouvernement reconnaîtrait l'utilité de prolonger ou de faire rayonner les lignes concédées par le présent marché, il réserverait de préférence à la compagnie, à conditions égales, la concession des nouveaux services à établir.

3. La compagnie s'engage à transporter gratuitement les correspondances sur la ligne principale et sur les lignes annexes, ainsi que sur toute ligne, soit parallèle, soit de prolongement ou d'embranchement, qu'elle ajouterait spontanément aux services qui font l'objet du présent marché, et pendant tout le temps qu'elle maintiendrait ces lignes.

Elle

Elle est tenue, en outre, de transporter gratuitement les espèces d'or et d'argent pour le service de l'État.

4. L'administration, après avoir pris l'avis de la compagnie, fixera les jours et heures de départ des points extrêmes, tant des lignes principales que des embranchements.

Elle réglera aussi le temps maximum à passer aux escales, entenant compte des besoins du service pour les dépêches, les voyageurs et les marchandises, et déterminera enfin la durée moyenne des traversées.

5. Le départ de paquebots du port de Suez ne pourra avoir lieu avant l'arrivée des dépêches de France. Toutefois, ce retard, dont la cause devra être mentionnée sur le journal de bord par le commissaire de Gouvernement, ne pourra excéder douze heures sans le consentement de la compagnie.

La compagnie n'aura droit à aucune indemnité pour la cause de ce retard.

6. Les paquebots ne pourront faire escale ou relâche en d'autres points que ceux désignés par le présent cahier des charges ou fixés comme il est dit ci-dessus.

Si les paquebots se trouvent forcés de relâcher sur d'autres points que ceux indiqués, le cas de force majeure devra être constaté par procès-verbal dressé en la forme d'usage. Si la relâche avait lieu dans un port étranger, le procès-verbal devra être certifié par le consul de France.

7. Il est interdit à la compagnie d'embarquer ou de débarquer des voyageurs et des marchandises ailleurs que dans les ports de relâche réglementaires.

CHAPITRE II.

Cautionnement.

8. Dans les huit jours qui suivront la notification à elle faite de la concession du service la compagnie sera tenue de verser, soit en numéraire, soit en rente quatre et demi ou quatre pour cent au pair, ou trois pour cent, calculées à soixante et quinze francs, conformément à l'ordonnance 10 Juin 1825, un cautionnement fixé à neuf cent mille francs.

Si le cautionnement est fourni en numéraire, il devra être versé à la caisse des dépôts et consignations. Après que les déposants auront justifié de leurs qualités et auront fait constater sur le registre spécial de cette caisse que le versement a été fait à titre de cautionnement, il leur sera délivré par le caissier général de la caisse des dépôts et consignations une déclaration destinée à leur tenir lieu de récépissé.

Si le cautionnement est fourni en rentes, il sera réalisé entre les mains de l'agent judiciaire du trésor, avec lequel la compagnie ou sa caution sera tenue de passer un acte qui constatera le dépôt, à titre de nantissement, des inscriptions de rentes, avec affectation, par privilège spécial, à la garantie de l'entreprise. Il en sera délivré un bordereau personnel au propriétaire des rentes pour lui servir à toucher les arrérages.

9. Le cautionnement sera affecté à la garantie de l'exécution des obligations contractées par la compagnie pour l'établissement des services mentionnés en l'article 1^{er}. Il sera remboursé au fur et à mesure de la réception régulièrement constatée du matériel exigé par l'article 17 ci-après etc., proportionnellement à l'importance de ce matériel.

CHAPITRE III.

Surveillance du Service.

10. Le commissaire du Gouvernement à Marseille sera chargé de veiller à l'exécution des clauses du présent cahier des charges.

Il pourra être institué, dans le même but, des commissaires du Gouvernement, soit à Suez, soit à Saïgon, soit à la Réunion.

Les commissaires du Gouvernement auront le droit de faire, à bord des paquebots, toute visite et vérification qu'ils croiront nécessaires, et ils pourront se faire accompagner, à cet effet, des personnes qu'ils jugeront capables de les assister dans leur examen.

11. Les commissaires du Gouvernement seront nommés par le ministre des finances.

12. Une commission de surveillance, composée de personnes appartenant à la marine militaire, à l'administration et au commerce, sera constituée dans chacun des ports têtes de ligne où cela sera jugé nécessaire. La formation en appartiendra au ministre des finances. Dans les visites et vérifications que le commissaire du Gouvernement fera à bord des paquebots, suivant le droit qui lui en est attribué par l'article 10, il pourra réclamer le concours de chacun des membres de cette commission.

La commission prononcera sur toutes les décisions qui pourraient être prises par le commissaire du Gouvernement, et dont la compagnie croirait devoir appeler devant elle.

13. Au moment du départ des paquebots, le tirant d'eau fixé pour la pleine charge sera vérifié par les soins du commissaire du Gouvernement, lequel s'assurera que l'équipage est au complet, et constatera l'heure du départ du bâtiment.

14. Le commissaire du Gouvernement et les agents des postes pourront, lorsqu'ils le jugeront convenable, exiger la communication du journal de bord.

CHAPITRE IV.

Des Paquebots.

15. La compagnie s'engage à avoir à flot, trois ans après la date du décret de concession, douze bâtiments à vapeur mus par trois mille six cent vingt-cinq chevaux nominaux.

A la même date, le service de toutes les lignes sera en pleine activité.

La compagnie aura le droit de devancer l'époque ci-dessus fixée, en prévenant, un mois à l'avance, l'administration des postes.

Après ces délais et pendant la durée du traité, la compagnie sera tenue de justifier, à toute réquisition, de la possession de douze bâtiments donnant ensemble au minimum la force de chevaux nominaux stipulée au présent article.

16. Les paquebots employés par la compagnie devront naviguer sous pavillon français.

17. En exécution des dispositions de l'article 15, la compagnie achètera ou fera construire :

Quatre navires de quatre à cinq cents chevaux (en moyenne quatre cent cinquante chevaux), ensemble - - - - - 1,800 chevaux.

Huit navires de deux cent vingt-huit chevaux (force moyenne), ensemble 1,825

3,625

Ces douze navires devront être ou avoir été construits en France.

La compagnie fera connaître les chantiers et ateliers dans lesquels seront effectuées les constructions.

L'Administration se réserve le droit d'exercer sa surveillance sur l'ensemble et sur tous les détails de ces constructions. Elle aura la faculté de déléguer à cet effet des agents qui pourront se faire communiquer les plans et marchés, et auxquels les chantiers et ateliers seront ouverts en tout temps.

18. La compagnie sera tenue de remplacer, dans le délai de trente mois, celui de ses navires qui viendrait à se perdre ou à être mis hors de service, de manière à compléter un minimum de trois mille six cent vingt-cinq chevaux.

19. Les vitesses moyennes, par heure, devront être de :

Neuf nœuds cinq dixièmes sur la ligne principale, et de neuf nœuds sur les embranchements.

20. Les bâtiments affectés au service des lignes mentionnées à l'article 1^{er} ne seront employés qu'après avoir été examinés et reçus par une commission spéciale nommée par le ministre des finances, laquelle aura seule qualité pour autoriser la mise en service. Cette commission s'assurera que les bâtiments satisfont aux conditions suivantes :

1° Que les navires et les appareils sont en bon état, d'une solidité suffisante, et propres au service postal et commercial auquel ils sont destinés ;

2° Que les chaudières peuvent supporter à froid, sans déformations sensibles, la charge d'épreuve en usage dans la marine impériale ;

3° Qu'au tirant d'eau moyen correspondant au demi-chargeement, les vitesses des navires sont supérieures de deux nœuds aux vitesses moyennes fixées pour chaque ligne ;

4° Que le travail des machines, mesuré sur les pistons au moyen de l'indicateur, est égal à autant de fois deux cents kilogrammes par seconde qu'il y a de chevaux dans la puissance nominale mentionnée dans l'article 17 ci-dessus savoir :

Quatre cent cinquante chevaux en moyenne pour la ligne principale.

Et deux cent vingt-huit chevaux en moyenne pour les embranchements.

Toutefois, il sera accordé une tolérance de cinq pour cent en moins sur la valeur de ce travail mécanique, si le navire satisfait à la condition de vitesse ci-dessus mentionnée.

21. Les paquebots seront installés comme les meilleurs paquebots-poste français ou étrangers ; ils comprendront, indépendamment des chambres nécessaires au logement de l'état-major et du poste d'équipage, des emménagements propres à recevoir des passagers de deux classes. Les installations seront pourvues de tous les objets nécessaires à l'usage des voyageurs.

22. Chaque paquebot devra embarquer, outre l'approvisionnement de combustible nécessaire pour accomplir la traversée à laquelle il est destiné, une réserve au moins égale au dixième dudit approvisionnement.

Il devra également prendre l'eau et les vivres solides et liquides nécessaires pour l'équipage et les passagers, même en cas de retard dans la navigation. Chaque paquebot des lignes principales devra être pourvu d'un appareil distillatoire.

23. Chaque paquebot sera, en outre, pourvu d'embarcations de sauvetage et de tous les objets d'armement exigés à bord d'un navire de commerce de première classe, des rechanges et des approvisionnements nécessaires pour assurer une bonne navigation. La commission chargée de la réception desdits navires en examinera l'inventaire, qui sera arrêté définitivement par l'administration, la compagnie entendue, et devra toujours être tenu au courant.

Les ancres, les câbles, les chaînes et autres objets en fer auront des dimensions et une force d'épreuve réglées d'après ce qui aura été décidé par le ministre des finances, sur l'avis du ministre de la marine, la compagnie entendue.

Tous les objets d'armement devront, de même, offrir toutes les garanties nécessaires à une bonne et sûre navigation.

Les paquebots se soumettront aux prescriptions réglementaires de la marine pour les feux de position à entretenir à bord.

24. A chaque départ, le commissaire du Gouvernement pourra vérifier si rien ne s'oppose à ce que le bâtiment puisse mettre en mer sans compromettre le service postal et la sûreté des personnes. S'il jugeait qu'il y eut lieu de l'empêcher, il convoquerait immédiatement la commission de surveillance, qui aurait le droit d'exiger que le bâtiment fût remplacé.

Faute par la compagnie de satisfaire à cette injonction, le commissaire prendra telles mesures qu'il jugera utiles pour assurer le départ des dépêches au jour fixé.

CHAPITRE V.

De l'entretien du Matériel des Paquebots.

25. Les paquebots, leurs machines et leurs objets d'armement devront être tenus en état constant de bon entretien.

Des inspections seront faites par tels agents que le ministre des finances voudra commettre à cet effet, afin de s'assurer de l'état du matériel et de tenir la main à ce que la compagnie n'apporte aucune négligence dans cette partie du service.

CHAPITRE VI.

De la Composition des Equipages.

26. Chaque paquebot aura une équipage dont le minimum est fixé ainsi qu'il suit :

	Par bâtiment de la force de		
	450 à 500 chevaux.	400 chevaux.	200 à 228 chevaux.
Capitaine	1	1	1
Second capitaine	1	1	1
Premier lieutenant	1	1	1
Second lieutenant	1	1	1
Troisième lieutenant	1	—	—
Chirurgien	1	1	1
Agent comptable	—	—	—
Premier maître d'équipage	1	1	1
Deuxième maître d'équipage	1	1	1
Charpentier, menuisier, calfat	—	2	1
Matelots	—	22	16
Novices	—	4	2
Mousses	—	2	2
Premier maître mécanicien	2	1	1
Deuxième maître mécanicien	1	3	2
Aides mécaniciens	3	3	2
Premier chauffeur et ouvriers graisseurs	—	16	12
Soutiers	12	10	6
Cuisinier d'équipage	3	3	2
Domestiques	8	8	4
Femme de chambre	1	1	1
Boulangier	1	1	1
Cuisinier et aides	—	—	—
Personnes	92	83	59

CHAPITRE VII.

De l'Agent des Postes à Bord.

27. Il pourra y avoir à bord de chaque paquebot un agent des postes nommé par le ministre des finances et payé par l'État, auquel seront confiées la réception, la conservation et la transmission des dépêches.

L'agent des postes aura une caractère officiellement reconnu par toutes les personnes du bord, ainsi qu'une autorité entière et exclusive pour tout ce qui concerne la réception et la transmission des dépêches qui lui seront confiées.

Une cabine de première classe sera gratuitement affectée au logement de l'agent des postes. Du plus, un local fermant à clef, contigu à cette cabine et approprié pour servir

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de bureau, sera disposé sur chaque paquebot d'après les indications qui seront fournies par l'administration des postes. Ce local devra être bien éclairé et suffisamment grand pour confectionner les dépêches qu'il y aura lieu de former pendant le cours du voyage. Un autre local, placé dans un lieu sûr et convenable, et fermé à clef, devra être disposé pour y déposer les dépêches.

L'agent des postes sera nourri à la table des passagers de première classe ou à celle des officiers pendant les relâches, moyennant moitié des prix du tarif.

Une embarcation convenablement armée sera mise à sa disposition, mais seulement pour les besoins du service.

Aucune personne autre que le capitaine ou l'un des officiers n'aura le droit de profiter de cette embarcation dès que les dépêches y seront embarquées.

Dans le cas où le bâtiment serait forcé de mouiller en rade par suite du mauvais temps, l'agent des postes pourra exiger qu'on mette à sa disposition celle des embarcations du bord tenant le mieux la mer. Dans cette circonstance, un officier devra en prendre le commandement.

28. Dans le cas où un agent de l'inspection générale des finances ou un agent du service des postes en mission relative au service de la correspondance serait embarqué à bord des bâtiments de la compagnie, il leur sera accordé gratuitement un passage de première classe, nourriture non comprise.

29. S'il n'est point placé d'agents des postes à bord des paquebots, ou si cet agent se trouvait, pendant le cours du voyage, empêché pour une cause quelconque de continuer son service, le commandant du bâtiment deviendrait responsable des dépêches au même titre qu'un agent des postes, et ce, sans avoir droit à aucune indemnité à raison de ce fait.

L'administration se réserve pour les cas énoncés ci-dessus, de prendre telles mesures qu'elle jugera convenables pour assurer la conservation et l'inviolabilité des dépêches.

30. Dans le cas où, par suite d'un accident éprouvé par un des bâtiments de l'entreprise, le voyage commencé ne pourrait s'achever, l'agent des postes sera chargé, si faire se peut, et en s'entendant à ce sujet avec les capitaines et les agents de la compagnie, d'assurer le transport des dépêches par le premier paquebot Français ou étranger se rendant au lieu de leur destination ou en communication avec les points intermédiaires ou correspondants. Les frais de ce transport extraordinaire seront à la charge de la compagnie, et retenus par l'administration sur le paiement de la subvention, selon les formes établies par le paragraphe 1^{er} de l'article 41.

31. Il ne sera reçu à bord que les dépêches et correspondances remises à l'agent des postes pour entrer dans le service postal, et les papiers de service comprenant les connaissements et les expéditions de navires, ainsi que la correspondance de la compagnie avec ses agents, et de ceux-ci avec elle. Les lettres et paquets formant cette correspondance devront être placés sous bandes, mais resteront entre les mains du capitaine.

Toutefois, en cas de suspicion de fraude, l'agent des postes aura le droit d'exiger l'ouverture des lettres et paquets, et procédera, à bord et en présence du destinataire, à un examen sommaire de leur contenu.

Conformément aux dispositions de l'arrêté du 27 prairial an ix, il est interdit à la compagnie de transporter de plis cachetés.

Toute contravention aux lois sur le transport des lettres commise par la compagnie ou par ses agents sera punie conformément aux lois.

En cas de récidive, et si les circonstances démontraient que le fait de contravention doit être attribué à l'un des agents de la compagnie, cet agent, sur la demande du ministre, devra être destitué, sans préjudice des peines qu'il aura encourues.

CHAPITRE VIII.

Du Transport des Passagers et des Marchandises.

32. La compagnie aura la faculté de transporter par les paquebots des passagers et des marchandises.

Le produit du transport des passagers, des matières d'or et d'argent et des marchandises, appartiendra à la compagnie.

Le produit de la taxe des correspondances et de leur transport appartiendra à l'administration des postes.

La compagnie ne pourra faire aucune opération commerciale, soit pour son compte, soit en participation, sur toutes les lignes indiquées au présent cahier des charges.

33. Les passagers fonctionnaires civils ou militaires et les ecclésiastiques Français voyageant sur réquisition de l'administration seront admis sur les paquebots de la compagnie avec leur famille et leur suite, en vertu d'une lettre des commissaires du Gouvernement en France; à Suez, à Saïgon ou à la Réunion, des gouverneurs et des commandants de station dans nos colonies, à trente pour cent de rabais sur les prix qui seront adoptés par la compagnie, tant pour les passagers de première et de deuxième classe que pour les passagers de pont.

Toutefois, si l'embarquement des passagers, en vertu du présent article, excédait le quart des places disponibles sur chaque navire, la compagnie devrait être prévenue un mois à l'avance pour les expéditions d'Europe dans l'Indo-Chine, et huit jours à l'avance pour les expéditions de l'Indo-Chine en Europe.

Les

Les lazaristes, missionnaires, sœurs de charité et tous autres membres des ordres religieux seront, s'ils sont Français, admis gratuitement à bord des paquebots, en France, sur la réquisition du ministre des finances transmise par les commissaires du Gouvernement; dans nos colonies, sur celle des gouverneurs, et à l'étranger, sur celle des agents diplomatiques ou consulaires.

Les marins, les soldats convalescents des stations et garnisons coloniales, les rapatriés et les indigents seront transportés aux frais de l'État au prix de sept francs par jour, nourriture comprise, la nourriture sera celle de l'équipage pour les classes énumérées ci-dessus, à l'exception des sous-officiers, qui seront admis à la table des maîtres.

Le nombre des personnes embarquées aux termes des deux paragraphes précédents ne pourra excéder, sur chaque ligne, dix par voyage, sans le consentement de la compagnie.

Le département de la marine aura, sur chaque paquebot, droit à vingt places pour sous-officiers, marins ou soldats et personnes assimilées, au prix de sept francs par jour et aux conditions de nourriture indiquées ci-dessus.

34. Les passagers seront traités convenablement à bord. Un registre sera toujours ouvert pour recevoir les plaintes que l'on croirait pouvoir exprimer. La commission de surveillance appréciera l'importance de ces plaintes, et jugera s'il y a lieu d'en référer au ministre des finances. Dans ce cas, le ministre aura le droit de provoquer le remplacement des agents reconnus coupables.

35. La compagnie sera tenue, sur chaque ligne, de recevoir à bord de ses paquebots, quand elle en sera requise, jusqu'à concurrence du dixième du tonnage du bâtiment, les armes et approvisionnements de diverses natures destinés au service de l'État. Les frais de transport de ces objets seront payés avec un rabais de trente pour cent sur le prix du tarif établi par la compagnie. En cas d'embarquement de munitions de guerre, toute la responsabilité des risques qu'elles occasionneront demeurera à la charge de l'État. Si l'État fait accompagner ces munitions par un agent spécial, la compagnie devra suivre ses indications pour l'arrimage des munitions à bord et les précautions à prendre.

Il est d'ailleurs bien entendu que la compagnie ne sera tenue de recevoir que les quantités d'objets qui pourront être contenues dans l'emplacement disponible à bord de ces paquebots au moment où elle aura été prévenue.

CHAPITRE IX.

Des Pénalités.

36. Les départs des paquebots auront lieu aux jours et heures fixés par l'administration des postes.

Tout retard dans l'heure du départ, tant des points extrêmes que des points intermédiaires de chaque ligne, hors les cas de force majeure dûment constatés, et ceux où les paquebots auront été retenus temporairement par l'autorité compétente, rendra la compagnie passible d'une amende de cinquante francs par heure.

Au delà de douze heures consécutives de retard non justifié, l'amende sera portée à cent francs par heure.

S'il est prouvé que le retard a eu pour cause l'embarquement tardif de marchandises ces amendes seront doublées.

37. Dans le cas où le retard apporté au départ d'un paquebot dépasserait vingt-quatre heures, le commissaire du Gouvernement, et, à son défaut, les agents des postes prendront, de concert avec les autorités locales, la compagnie entendue, toutes les mesures nécessaires pour assurer le service des dépêches, et tous les frais résultant des dispositions prises seront mis à la charge de la compagnie.

Lorsque, pour une cause quelconque, les dépêches ne pourront être expédiées que par le paquebot qui effectuera le départ réglementaire postérieur au départ non accompli, le nombre de lieues qui n'aura pas été parcouru dans ces conditions donnera lieu à une réduction proportionnelle de la subvention.

38. En cas de relâche non justifiée par des circonstances de force majeure, l'amende sera portée pour une première relâche à mille francs et à deux mille francs pour la seconde; à la troisième infraction, cette amende pourra être portée à cinq mille francs.

Dans les cas prévus par le paragraphe précédent, s'il a été embarqué ou débarqué des marchandises ou des voyageurs, les amendes seront doublées.

39. En cas de perte d'un paquebot, si le remplacement prescrit par l'article 18 n'a pas lieu dans le délai fixé, la compagnie, sauf les circonstances imprévues dont le ministre des finances sera juge, sera passible, par chaque jour de retard, d'une amende de trois cents francs, s'il s'agit de remplacer un navire de quatre cent cinquante chevaux, et d'une amende de cent-cinquante francs s'il s'agit de remplacer un navire de moins de quatre cent cinquante chevaux.

40. Dans le cas où la compagnie ne commencerait pas le service dans le délais fixés par l'article 15 ci-dessus, elle subira une retenue de cent cinquante francs par jour de retard et par chaque ligne qui ne sera pas en pleine activité de service.

41. Le montant des amendes et des retenues, fixé conformément aux dispositions des articles ci-dessus, sera prélevé par l'administration sur les sommes dues à la compagnie.

CHAPITRE X.

Durée du Traité.

42. La durée du traité sera de vingt-quatre années consécutives à partir de trois ans après la date du décret de concession, ou à partir de l'époque à laquelle tous les services seront en pleine activité, si cette époque est antérieure aux trois ans.

CHAPITRE XI.

Mode de Paiement de la Subvention.—Epoque des Paiements.

43. Moyennant la subvention qui sera allouée, la compagnie exécutera les services mentionnés à l'article 1^{er} du présent cahier des charges, à ses frais, risques et périls, et toutes les dépenses de nature quelconque, y compris les risques de la mer, seront à sa charge.

44. Le paiement de la subvention sera ordonné à terme échu par l'administration des postes, de mois en mois et par douzième, sous la déduction des retenues qui auraient pu être prononcées dans les cas prévus au présent cahier des charges.

Si, avant les délais fixés par l'article 15 du présent cahier des charges, la compagnie met en exploitation la ligne principale et l'un ou plusieurs des embranchements, il lui sera payé une subvention proportionnelle au parcours effectué et à la puissance des navires affectés à chaque ligne.

Les paiements auront lieu à Paris ou à Marseille, au choix de la compagnie.

CHAPITRE XII.

En Cas de Guerre.—Du Règlement des Indemnités.

45. En cas de guerre maritime ou d'hostilités dans l'un quelconque des bassins desservis par la compagnie, le Gouvernement supportera les chances de guerre qui pourraient en résulter, à moins qu'il n'ait mis la compagnie en demeure de cesser son service.

Si l'État met la compagnie en demeure de cesser son service, la compagnie aura cependant la faculté de le continuer, en tout ou en partie, à ses risques et périls.

Le temps de la cessation totale ou partielle sera, au choix de la compagnie, compris ou non compris dans la durée de la concession.

Si le service est suspendu, l'État aura la faculté de prendre possession immédiate des bâtiments demeurés sans emploi, avec tout leur matériel et approvisionnements.

Il sera fait du tout une estimation par une commission composée de deux personnes au choix du ministre des finances, et de deux autres personnes au choix de la compagnie. Ces quatre personnes, à la majorité des voix, en désigneront une cinquième, à laquelle la présidence sera dévolue. En cas de partage des voix, cette désignation devra être faite par le tribunal civil du siège de la compagnie.

Après la guerre, les bâtiments, le matériel et les approvisionnements seront remis, lors de la reprise du service, sur une estimation semblable, qui tiendra compte des dépréciations et des pertes pour une cause quelconque.

Au préalable, l'État fera réparer les navires pour qu'ils puissent exécuter le service postal et commercial.

L'État payera à la compagnie, pour tout loyer, une somme annuelle représentant l'intérêt à cinq pour cent du capital réglé par la commission ci-dessus et la part des frais restant à sa charge. La subvention sera d'ailleurs suspendue pendant toute l'interruption du service.

46. Dans le cas où l'État n'userait pas de la faculté qui lui est donnée de prendre possession des bâtiments, du matériel et des approvisionnements de la compagnie, il aurait à lui payer, à partir du jour de la cessation de tous les services, un intérêt de cinq pour cent de son capital, plus cinq pour cent pour dépréciation de la valeur des bâtiments, du matériel des approvisionnements, le tout réglé par la commission instituée par l'article 45, plus la part des frais restant à sa charge.

47. Dans tous les cas, la guerre terminée, le ministre des finances pourra relever la compagnie des obligations du marché, si les événements de la guerre l'avaient mise dans l'impossibilité de reprendre le service.

De son côté, la compagnie aura la faculté de se refuser à exécuter immédiatement le traité, si les bâtiments livrés par elle à l'État ne lui étaient pas rendus en assez grand nombre pour permettre d'effectuer un service complet.

Dans ce cas, des arrangements seraient pris entre le ministre des finances et la compagnie, relativement aux époques de l'exécution partielle ou intégrale de telle ou telle ligne.

48. En toute circonstance politique extraordinaire, même hors le cas de guerre maritime, le Gouvernement pourra acheter ou prendre à fret un ou plusieurs paquebots. Dans les mêmes circonstances et en cas d'urgence, les gouverneurs, dans les colonies, qui auraient à opérer des mouvements de troupes, pourront requérir l'embarquement de ces troupes sur les navires de la compagnie.

Dans

Dans ces deux cas, l'indemnité de vente ou d'affrètement, ainsi que celle due pour les dommages que la compagnie pourrait en éprouver dans l'exécution de son service, seront réglées par la commission instituée par l'article 45.

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CHAPITRE XIII.

Mode de Concession.

49. La concession des services mentionnés dans le présent cahier des charges sera faite directement par le ministre des finances.

CHAPITRE XIV.

Dispositions Particulières.

50. Dans le cas où, pour toute autre cause que le cas de guerre, ou de force majeure, qui s'opposerait à la continuation du service faisant l'objet du présent cahier des charges, la compagnie suspendrait ou cesserait l'exploitation, l'État aurait le droit de reprendre, à dire d'experts, les bâtiments avec tout leur matériel et leurs approvisionnements, sans préjudice des dommages-intérêts qui pourraient être dus à l'État.

51. La compagnie ne pourra sous-traiter de son entreprise en tout ou en partie sans le consentement par écrit du ministre des finances. S'il était reconnu qu'elle eût sous-traité sans son consentement préalable, le ministre des finances serait en droit de réaliser le traité sans indemnité pour la compagnie.

52. Toutes les difficultés auxquelles pourrait donner lieu l'exécution ou l'interprétation des clauses du présent cahier des charges seront jugées administrativement par le ministre des finances, sauf recours au conseil d'État.

53. La compagnie aura son siège à Paris.

Vu pour être annexé au projet de loi adopté par le Corps législatif dans sa séance du 17 juin 1861.

Le Président,
Signé Comte de Morny.

Les Secrétaires,
Signé Vernier, Joachim Murat, baron Jérôme David,
comte Le Peletier d'Aunay.

Vu pour être annexé à la loi relative à l'exécution du service postal de l'Indo-Chine.

Le Sénateur secrétaire du Sénat,
Signé Baron T. de Lacrosse.

Vu pour être annexé à la loi du 3 juillet 1861.

Le Ministre d'État,
Signé A. Walewski.

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PAPERS handed in by Mr. H. C. Forde.

MALTA AND ALEXANDRIA TELEGRAPH.

FINAL REPORT of H. C. Forde to the Secretary to the Board of Trade.

Dated 1st November 1861.

Sir, Malta, 1st November 1861.

THE last section of the Malta and Alexandria cable was completed on the 28th September, and the 30 days' probation, during which the Government official tests were taken, expired on the 28th October. It now therefore becomes my duty to lay before you, for the information of the Lords of the Committee of Privy Council for Trade, my final report and certificate of the state of the cable.

I have already forwarded to you, from time to time, detailed reports of the laying of each section. I shall therefore in this report confine myself to giving a description of the general measures adopted in the manufacture, transport, and laying of the cable, of the manner in which the work was performed, as well as of the electrical condition of the line before and after submersion, and at the expiration of the 30 days after the laying of the last section.

General Remarks.

The manufacture of this cable commenced in June 1859, and it has therefore been two years and four months in hand.

It was however only decided in December last (having been first destined to be laid between Falmouth and Gibraltar, and subsequently between Rangoon and Singapore) to submerge it between Malta and Alexandria, when orders were immediately given to have the route sounded and surveyed.

This portion of the work, so essential in carrying out an undertaking of this kind, was performed most expeditiously, and in a very complete manner, by Captain Spratt of Her Majesty's ship "Medina," and by Commander Mansel of the "Firefly," and I trust the result of their labours will tend materially to secure the permanence of the line, as in previously-laid cables failures can be traced to the want of knowledge of the depths, configuration and composition of the sea bottom. I have therefore every reason to expect that these precautions will have removed all risk of failure on that head.

The design adopted by the late Mr. Lionel Gisborne and myself has proved superior to that of any other cable hitherto laid.

Its conductor is far larger and therefore offers much less resistance to the passage of electricity than in any existing cable, and owing to the extra

thickness and good quality of the gutta-percha covering, as well as to the improved method of manipulating and laying it on, there is strong additional reason to hope that the cable will remain in good condition for a considerable period.

During the progress of the work, and from its very commencement the cable has been subjected to the most searching and delicate system of tests arranged and carried out by Messrs. Siemens Halske, & Co., and under Mr. W. Siemens immediate superintendence.

It was specified that the cable should be kept constantly under water and so tested, and the arrangement has been carried out with but few and unavoidable exceptions.

The tests so obtained are incomparably more valuable than if the cable had been tested in dry condition, as has hitherto been the case.

Every length as the manufacture progressed was subjected to hydraulic pressure, from 600 to 800 lbs. to the square inch; this is, with one slight exception, a greater pressure than it has now to bear. I may here mention that when undergoing the pressure test the electrical condition of the cable invariably improved about 10 per cent.; this improvement that has been observed during submersion is no doubt partly due to pressure.

It was decided by Her Majesty's Government under our advice, to have the cable laid (with the exception of a length of about 70 miles from Malta, where deep water was unavoidable) in such depths as would enable repairs to be easily effected should such become necessary. As wherever the bottom was uneven and rocky, was the case in several places between Benghazi and Alexandria, a very heavy cable, weighing about seven tons to the mile, was laid instead of the main or deep-sea cable which weighed 2½ tons to the mile (which latter, however, is more than double the weight of the Atlantic and Red Sea and Indian cables).

In carrying out the principle of a shallow water line it was of course necessary to follow the general direction of coast; this could not be done without the expenditure of about 1,300 miles of cable instead of 900, which is all that would have been required had the direct and deeper route been adopted.

It therefore became desirable to divide the line into sections, and accordingly Tripoli and Benghazi

re selected as intermediate stations; this arrangement not only greatly increases the speed of transmission, but facilitates to a considerable extent testing operations and the determination of the position of faults or breaks in the cable if they should occur.

The Malta and Alexandria cable is not only the first instance of a cable during manufacture having been constantly kept and tested under water, but the special arrangements made on board the ships "Rangoon" and "Malacca" it was carried to its destination completely submerged in water-tanks from which it was paid out into the

This precaution we thought a most essential one, and is the only really reliable plan of preventing instantaneous heating, which is liable to take place to an injurious extent when the cable is coiled up in a large and compact mass. And it also preserves the gutta-percha from injury by oxidation on exposure to air and light. Gutta-percha, as has past experience proves, is practically indestructible if constantly kept submerged in water. It has also the further advantage of enabling those engaged in the operation of laying the cable to judge of its electrical condition to the last, and guard against faults passing over into the sea, whether these occur maliciously or otherwise.

Execution of the Work.

The contract for the cable was divided into three parts, viz:

- 1st, contract for the supply of the gutta-percha covered wire or core.
- 2nd, contract for the outer covering of this core, or making it into a finished cable.
- 3rd, contract for laying and maintaining the cable for 30 days after complete submersion.

The 1st contract was made between the Government and the Gutta-Percha Company, and it is bute to them to state that their contract was performed in a very liberal and spirited manner, their workmanship and materials improving as the work progressed and as experience enabled improvements to be made.

The second and third contracts were let to Messrs. Mess, Elliot, & Co., who have carried out their portion of the work in a manner which will I trust stand the test of time and do them credit.

The first portion of this cable left England on board the "Malacca" on the 25th April last, and on the 27th May the paying out was commenced at Malta; and the first section to Tripoli was finished on the 30th of the same month.

This was so successfully accomplished that it gives me every reason to believe the cable will continue in the same good condition for the transmission of messages, as it is at present, after having been submerged for five months.

The length of cable in this section is 230·2 knots. The landing place at Malta is in a well-sheltered bay in Marsa Scirocco, on the east side of the Island of Malta, and is connected with the chief office in Valetta by means of a well-constructed two-wire land-line 5 miles in length, supported by iron posts firmly built into walls, or inserted into the rock.

The shore end, which is of the heaviest description, is about 4 miles in length, lies on an even and good bottom, and extends out to a depth of about 50 fathoms.

At Tripoli, the shore end is also laid on a good sandy bottom and beach, about 1 mile to the west of 0.43.

of the town, and is connected with the office in the same manner as at Malta; its length is also 4 miles, and extends out into a depth of about 30 fathoms.

After the completion of this section, there remained on board 290 knots of cable, which were laid in the direction of Benghazi, the end being sealed and buoyed on the morning of the 3rd June, in the Gulf of Syrtis.

The next portion of the cable laid was from Alexandria towards Benghazi. This was the most difficult and critical portion of the whole line to lay, in consequence of the very uneven, and in parts rocky nature of the bottom.

Captain Spratt had prepared an enlarged chart of this part of the coast for 300 miles from Alexandria to the Gulf of Milhr, and had taken soundings much closer than on any other portion of the line.

Vice Admiral Sir W. F. Martin, Commander in Chief on the Mediterranean station, kindly gave us the assistance of Her Majesty's ship "Mohawk," in addition to Her Majesty's ships "Medina" and "Scourge," which last-named steam-vessels accompanied the first expedition. These three ships were well supplied with buoys to mark the course, in order to insure the cable being laid within the 100 fathom line, and on as even a bottom as possible; and as a further precaution, the work was only carried on by daylight, the ships anchoring each night soon after sunset.

The "Rangoon" on her first trip carried out this portion of the cable, in length 282½ knots, and weighing 1,241 tons, exclusive of 200 tons of water in the cable cylinders.

The paying out of this cable was commenced from Alexandria, on the 6th July, and it was laid in the following order, viz:—

11·45 knots, shore end	7 tons per knot.
55·22 „ main cable	2·4 „ ditto.
37·92 „ shore end	7 „ ditto.
14·62 „ main cable	2·4 „ ditto.
9·45 „ shore end	7 „ ditto.
24·62 „ main cable	2·4 „ ditto.
69·95 „ shore end	7 „ ditto.
59·46 „ main cable	2·4 „ ditto.

TOTAL, 282,69 knots of cable from Alexandria to the Gulf of Milhr.

The paying out of this cable occupied six days, and no accident of any sort occurred, with the exception of one kink which came into the cable when at anchor; this was immediately cut out, and advantage was taken of this circumstance to test the cable in two parts, the portion laid, and the remainder in the ship.

The laying of the continuation of this section was not commenced until the 20th September, on which occasion the buoyed end was picked up. The cable taken out by the "Rangoon" on her second trip was then spliced on, and on the morning of the 23rd, the end was landed close to the cable house at Benghazi, making in all, 593 knots of cable laid in this section.

One night was spent at anchor on the Dernah Bank, as it was necessary to pass Rasseen by daylight, the water in the vicinity of it being deep, and the coast very precipitous.

The landing-place at Alexandria is in the new port, to the east of the town, clear of anchorage; the shore ends are taken direct out to sea for 10

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miles, so as to give the outer anchorage where men-of-war anchor a wide and clear berth.

The cable is connected with the Red Sea and Indian Telegraph Company's Office by means of a land line, about 1 mile in length.

The landing-place at Benghazi is about 1 mile to the east of the town, and is connected with the station in a similar manner as that previously described.

After the completion of the Benghazi Alexandria section, there remained but a length of about 220 miles to complete the entire line. The cable for this was brought out by the "Malacca" on her second trip, and met the expedition at Benghazi.

On the morning of the 25th September, the "Malacca" arrived in the locality of the buoyed end of the Tripoli cable in the Gulf of Syrtis, but it was not until the day was far advanced when the "Medina" came up, and pointed out the exact position of the buoy that operations were commenced.

Notwithstanding a strong breeze and a rough sea the buoy was secured to a rope and was almost on board, when accidentally the rope slipped round the picking-up machinery, and the attempt had to be abandoned for the night.

On resuming operations the following morning, it was discovered that the buoy had disappeared; it therefore became necessary to dredge for the end, which was grappelled in a few hours, notwithstanding the roughness of the bottom, causing the loss of one grapple and hawser, and breaking a second grapple.

About 5 p.m., the end of the laid cable was brought on board; and the cable between the ship and Tripoli testing satisfactorily, the splice was made, and paying out operations commenced at 8.30 p.m., the "Medina," as on all former occasions, leading the way; Her Majesty's Ship "Assurance" remained close to the "Malacca" to render assistance if required, and Her Majesty's Ship "Mohawk" proceeded in advance, to mark positions previously fixed by Captain Spratt, and also to take soundings, so that no time should be lost, which at this season of the year might have proved very prejudicial to the whole undertaking.

As was the case throughout all our previous operations, everything worked smoothly and quite to our satisfaction, and at 11 a.m. on the 28th September, the "Malacca" came to anchor about 9 miles to the west of the town of Benghazi, where a buoy had been previously placed to denote the position where to splice on the shore ends. A few hours sufficed for this, and the cable expedition was soon again in motion, and as the ships approached the shore, the "Malacca" made the following signal to the "Medina."

"Many thanks for the valuable assistance rendered by Captain Spratt, and Her Majesty's ships."

To which Captain Spratt replied:

"Fortune favours the enterprise. I congratulate you on success."

About 7 p.m. the last shore end was landed at Benghazi, under a salute of 21 guns, to announce the important event that Malta and Alexandria were in direct telegraphic communication. The weather, as on the previous occasion of landing the first shore end, was very kind and propitious, a matter of congratulation, as the coast at this place is much exposed and often unapproachable.

In reviewing the whole operation of laying the

1,330 knots of cable, which connects Malta with Alexandria, it is very gratifying to feel that as a mechanical operation nothing could have been more satisfactorily or successfully accomplished. The paying-out machinery, on all occasions worked evenly, and with the utmost precision which reflects great credit not only on Messrs Canning and Clifford, the contractors' engineers, but also upon every man employed on board in connection with it. The brakes, with the exception of a few instances, when the heaviest cable was being paid out into deepish water, were quite relieved of all weight; and it was evident from the appearance of the cable passing over the stern of the ship, that sufficient slack was being paid out to insure its resting in every instance upon the bottom.

The landing-places have been very carefully selected, all of them clear of anchorages, and with the exception of Benghazi, there is no danger of the shore ends being worn away by attrition. A better place, however, could be found at Benghazi and I have recommended Mr. Glass, who has leased the working of the line, to keep some spare shore-ends at that station, so that any accident to them might be repaired without delay.

The ends of all the sections have been brought underground into well-constructed cable-houses, of sufficient dimensions to enable testing operations to be conducted inside without having the air wire in circuit. This plan also enables the connection between the air-wire and submarine cable to be made securely inside the cable-house, with proper lightning dischargers placed at the point of junction. On each post of the land-line lightning conductors are also placed.

Electrical Condition of Cable.

In dealing with this part of the question, I shall confine myself to a very few remarks, preferring rather to draw your special attention to the valuable report of Dr. Esselbach, attached to the Report.

Dr. Esselbach was selected in the first instance by Messrs. Siemens, Halske, & Co., to proceed to the Mediterranean, and take charge of their electrical staff, and I am happy to state, that in my opinion no better appointment could have been made. He has had considerable experience in testing long submarine cables, which experience has been fully and advantageously brought to bear in this instance.

I have had the benefit of consulting with Dr. Esselbach, not only during the manufacture of the cable, but also during all the final operations connected with the laying, and I am happy to state that upon every point we are perfectly agreed.

When the contract was first decided upon, it was stipulated that the electrical tests during paying out, were to be conducted by the Government staff. This arrangement was, however, altered shortly before this operation commenced and it was decided that this part of the work should be undertaken by the contractors, and upon their own responsibility.

The arrangements made by them to carry this into effect, was the ordinary method previously used in laying the Atlantic and other cables, viz. by taking five minute reversal tests, or deflection of the galvanometer, which tests were superintended by Mr. de Sauty.

Dr. Whitehouse, who was also on board on part of the contractors, tested the cable periodically for resistance of insulation, by a method

ch to a certain extent was an adaptation of employed by Mr. Siemens; by this means I enabled during the operation of paying out, draw a comparison between the then state of cable, and the Government tests previously en.

No. 1 Section.—*Malta to Tripoli (230·2 knots Cable.)*

With reference to this section, the electrical condition of its cable was carefully and continually watched, even on its passage from England (Malta, and no doubt has ever existed as to its excellent condition, with one exception. This section has reference to the heating of the coil shore-end cable on its passage out, and the subsequent lowering of its insulation. The insulation, however, appeared to be satisfactorily preserved as soon as the cable was placed under

operation. During the operation of paying out the insulation improved 81 per cent., caused principally by the lining of the cable passing from a warm and dry state out of the hold of the ship into the sea, which on this section has an average depth of 10 fathoms; 7 per cent. of the above improvement can only be attributed to pressure.

This section, as has been previously stated, was completed on the 30th May, but no official test was made of it until the 23rd August; it was then tested on every alternate day, until the 20th September, and afterwards on every alternate day for 30 days after completion of the whole line. The result of these tests showed a slight improvement of insulation during the last-named period, which is satisfactory, considering the section had been completed five months.

No. 2 Section.—*Tripoli to Benghazi (507 knots Cable.)*

The first 289½ knots of this section, east of Tripoli; were laid on the 3rd June, immediately after the completion of No. 1 Section, and it will be seen by Dr. Esselbach's Report that it invariably tested well.

After the completion of this section did not take place until the completion of the whole line on the 28th September, immediately after which the contractors' official tests were commenced.

Dr. Esselbach, in his report, has pointed out in detail all the circumstances connected with the laying of the piece of cable which forms the last portion of this section, and the refusal of the contractors to cut it so as to enable tests to be made of the separate portions, which was the only method of arriving at a satisfactory solution of the cause of the sudden fall of insulation, which occurred at Greenwich, when the cable was being placed on board ship, and was denoted by the series of tests taken on the part of the section.

It is certain that the insertion of this piece of cable has slightly lowered the general insulation of the whole section, as compared with the insulation of the first-laid portion of it; but this general finding is not conclusive evidence in itself of a defect existing in the section.

The evidence for this could only be obtained by the proposed method of testing the cable in short lengths.

By comparing the insulation of the first with the last day of the period of 30 days' official tests of submersion, a slight falling off in insulation

was observed at the latter date, as will be seen by reference to the annexed table. App. No. 10.

It was also observed that the maximum and minimum range of variation during this period differed by about 34 per cent., being somewhat in excess of the range of variation on the other sections.

Notwithstanding, however, the final test showed that the insulation resistance of the cable was higher than the standard* fixed by us and the Government Electricians, Messrs. Siemens and Halske.

Since the contractors took upon themselves to lay a piece of cable against the protest of the Government engineers and electricians, I would recommend that as they have taken a working lease of the line, they should be held responsible for any interruption that may arise during the currency of their lease, on that portion of the section in which the suspicious piece of cable was inserted.

The portion alluded to is 100 knots in length, extending from the junction of the shore end with the main cable, or about 10 knots west of Benghazi, towards Tripoli.

As this cable was destined to be laid in a moderate depth of water (not exceeding 50 fathoms) from which it could at all times be recovered in case of any fault becoming serious, I did not think it desirable to delay the completion of the line at that late period of the year, and therefore proceeded on board, and witnessed its submersion under protest.

No. 3 Section.—*Benghazi to Alexandria (593 knots Cable.)*

The cable for this section was conveyed in the "Rangoon," in two separate trips. The first portion arrived at Alexandria about the 1st July, and consisted of 282 knots of cable, a large proportion of which consisted of cable taken out of the "Queen Victoria," at Plymouth, that had been exposed to unusual vicissitudes.

This cable was tested at Plymouth, and approved of by the Government electricians immediately before its departure for the Mediterranean; it was not, however, tested on its passage out, as was the case with the cable on board the "Malacca," on her first trip. It was, therefore, difficult to account for the undue lowness of its insulation, as appeared by the official tests taken at Alexandria, on its arrival there, notwithstanding the water in the cable cylinders was at a high temperature, about 77° Fahrenheit.

I saw no reason, however, why this cable should be subjected to the process of cutting, and, perhaps, coiling over in a warm climate, especially as the very best method of detecting any imperfection would be presented during the process of paying out; and as the contractors' electricians expressed themselves satisfied with the state of the cable, I offered no opposition to its being submerged, but drew their special attention to the necessity of taking very accurate and careful tests of the cable during the process of submersion. In addition to which, Mr. Laws and I watched its electrical condition, as well as the means at our disposal admitted.

According to the tests taken by the contractors, the electrical state of this first portion of the section improved during the process of submersion, nearly

* The standard adopted was 100 millions of Siemen's units per knot, at a temperature of 75° Fahrenheit.

App. No. 10. nearly 100 per cent., but owing to its low state at starting, I expected a greater improvement.

The average depth of water, however, in this case is but 33 fathoms as compared with 133 fathoms and 86 fathoms on No. 1 and 2 Sections respectively; it was therefore not to be expected that the final insulation of this cable would be equal to that of the other two sections.

The end of this piece of cable was sealed up and dropped in 30 fathoms in the Gulf of Milhr, on the 11th July last; but it was not until the 29th August following, or after an interval of 48 days, I was enabled to take an official test of it.

The official tests of this piece of cable were taken on six separate days, the last being on the 5th September, and the result proved that the insulation of the cable was considerably below the point Dr. Whitehouse's final test, after laying, placed it at.

I was therefore pleased to find that on the 20th of the same month, when the sealed end was picked up and properly insulated, that the insulation resistance rose to 112 millions of units from 72 millions of units, at which it stood on the 5th September.

Between the 20th and 23rd September, the remaining portion of this section was laid by the addition of 311 knots of cable, carried out by the "Rangoon" on her second trip.

The electrical state of this second portion calls for no particular comment, further than what Dr. Esselbach has mentioned in his report.

With respect to the 30 days' official tests of the complete section, I have to observe that by comparing the first tests with the last, a gradual improvement appears to have taken place in its insulation, and upon the whole it appeared above the standard previously alluded to.

The extreme range or variation in the tests during the month, amounted to 32 per cent., or something less than that of No. 2 Section; that of No. 1 Section was 25 per cent.

It is difficult to account for these variations in tests, especially where the daily conditions remain the same, but such phenomena have been found to occur occasionally from the very commencement, and therefore they are not without precedent.

Conclusion.

Looking at this cable as a whole, it gives me pleasure to congratulate Her Majesty's Government on having laid what I trust, time will prove to be the best cable hitherto made. As to its capacity for transmitting messages, it may be said to have exceeded our expectations, especially when we take into consideration the unprecedentedly low battery power with which it is practically worked, as will be seen by the following statement:—

	Knots.	
No. 1 Section. Malta to Tripoli	230	3 elements.
" 2 " Tripoli to Benghazi	507	4 "
" 3 " Benghazi to Alexandria	593	6 "
TOTAL	1,330	12 "

It is more in this respect than in speed that the advantage of a large conductor is observable, and this very fact is of vital importance with reference to the longevity of the line.

The Red Sea and Indian Telegraph Cable was considered (and properly so) a great step in advance of previously made cables, but the battery power employed in working it for 500 miles of circuits was from 60 to 70 elements, whereas in the Malta and Alexandria Cable, the same length worked at a higher speed, with only four elements, and were it not for the existence of strong ear currents, a still lower battery power might be used.

The speed of No. 1 Section may be said to be limited only by the proficiency of the manipulators, upwards of 25 words a minute have been transmitted through it.

There is a visible retardation on the other sections, but I consider 12 to 15 words per minute may be considered as the measure of the transmitting powers, and this speed I expect to be practically maintained.

When all three sections were joined up in a circuit (1,330 knots) about four words per minute were transmitted; but as this was the result only one trial, I consider this rate of working to be lower than what could actually be obtained the course of a few trials.

It has been found in practice that an average of 12 messages per hour, of 20 words each, including all delays attending their transmission and acknowledgment, can be easily transmitted from end to end; taking this average, and taking length of a working day at 20 hours, the result a year's working, exclusive of Sundays, would amount to an annual revenue of 112,680 £., while taking the cost of the line at 500,000 £., would represent a gross profit of over 22 per cent., deducting working expenses, a net annual profit about 20 per cent.

Contrary to my expectations, there were at 52 knots of spare cable over and above, and completing the whole line, viz.:—

Shore End, No. 1	-	-	16 knots.
Ditto - No. 2	-	-	23 "
Main cable	-	-	13 "
TOTAL	-	-	52 knots.

This large surplus is chiefly owing to the great success that attended the paying out of the cable, as not a yard was lost through accident to machinery or otherwise, and as no electrical fault could be detected passing from the ship into the sea, during the submersion of the 1,330 knot cable, no waste took place under this head. I consider this last fact worth recording, as judged from my own experience, I do not believe such length of cable was ever before submerged without faults of insulation appearing after it had paid into the sea.

This was certainly due to the adoption of water-tight cable tanks on board ship, and I am firmly of opinion that they are an essential part of the fittings of any ship employed on submarine service.

In proof of this I may mention that at Malta on one occasion a fault was discovered and cut out of the centre of one of the large coils on board "Rangoon," second trip, which, if the cable had not been tested under water, would almost certainly have escaped notice until it had come some time at the bottom of the sea.

For the purpose of storing the above-mentioned spare cable, two large tanks have been constructed in a convenient site in the Quarantine Harbour.

ta; and so arranged that the cable will always be kept under water.

Before concluding this report, it is but due to the Government Staff that I should avail myself of this opportunity of drawing attention to the services rendered by them, and to express the great satisfaction I experienced in superintending this most important work from its commencement to its final completion in conjunction with them.

In the first place, a system of electrical tests was devised and carried out, which was much more exact and delicate than any system previously adopted, and it is due to Messrs. Siemens, Halske & Co. to give them the credit of introducing this improved method, which has been ably carried into effect by their own staff, and by means of instruments of their design and manufacture. No better can be quoted of the excellence of the system of electrical tests adopted on this occasion than to state that it is now coming universally into vogue, and superseding the mode of testing adopted on former occasions.

In making this statement I must add that the system had been partially adopted by Messrs. Siemens in the cases of the Aden and Kurrachee, Singapore and Batavia, and other lines.

On these occasions this system of testing was carried out during the laying, and not during manufacture and voyage out, and the absence of water-tight cable tanks prevented the full benefit from being experienced.

Mr. Esselbach, who has filled the position of Chief of Government Electrician to the late expedition in the Mediterranean has superintended and conducted out the official tests in a most satisfactory manner, as will be seen by his very valuable report annexed hereto.

Mr. Esselbach has received great assistance in the performance of these important duties from Messrs. Sonnerman, Putsch & Hirz, who were left at the different stations (Benghazi, Tripoli and Alexandria), for the purpose of taking the special observations at those places.

Mr. J. Milner personally superintended on behalf of the Government the manufacture of the cable covering of the core, and all the arrangements connected with the shipping of the cable.

I have the greatest pleasure in testifying to the excellent manner in which those duties were performed.

Mr. J. C. Laws, who has acted in the capacity of Assistant to us (the Government Engineers) from the very commencement, has rendered very valuable services, not only in the electrical department (which is his specialty), but also in carrying out all the engineering operations connected with the laying; and I am glad to have this opportunity of stating that I have derived much benefit from availing myself of his advice on several important occasions.

It now becomes my painful duty to allude to the death of my late partner, Mr. Lionel Gisborne, and to express my great regret not only for the personal loss I have sustained in his death, but for his loss professionally, though it occurred only after a portion of the cable was actually shipped, and after the whole plan of operations had been definitely settled and carried out in the actual execution of the work.

It is a duty I owe to his memory to state here, and to any success that has been obtained in carrying

out this important work is due more to his comprehensive arrangements than to any other person charged with special portions of it. It was to him especially that the adoption of the system of electric tests above alluded to is due, and these tests were devised to be continuous; in order to detect the presence of small faults which might creep in during the manufacture, and until the submersion of the cable, and which could not possibly be detected by any system of merely intermittent tests.

I had almost omitted to mention that in this way the dangerous generation of heat in the large cable coils both at the works at Greenwich, and on board ship, was detected; and means were therefore at once successfully adopted to check this source of danger.

The system adopted in this case of dividing the contract for the cable into two parts as explained in the first part of my report worked well.

We were thus enabled to test the core at the Gutta Percha Company's Works; and thoroughly satisfy ourselves as to its condition before allowing it to be sent to those of Messrs. Glass & Co.

After the core had left the vacuum and pressure tanks, it was carefully overlooked and examined inch by inch, when any slight defects, such as air-bubbles, which had been made apparent by these processes were immediately made good.

I regret I have been unable to condense this report into a smaller compass; but I desired to place on record every material fact that would tend to throw light upon so important a subject as the successful establishment of submarine telegraphy, and tend to the advancement of the science.

The cable just completed is the result of all past experience on this subject, and will undoubtedly be the guide for some time to come of lines that may be hereafter laid.

Now that this line is laid, I would not recommend that it should be subjected to the same amount of testing as has hitherto been practised.

Accompanying this report are charts upon which the position of the cable is accurately marked; and also a longitudinal section of the whole line, showing the depths of water throughout, and the nature of the bottom as well as the position of the different sized cables laid.

I also append a tabular statement giving in a concise form a few details which may be of use for future references.

Reviewing the whole state of the case as represented in this and Dr. Esselbach's Report, it gives me much pleasure to grant this my final certificate in accordance with Clause 10 of the specification, viz., that the cable at the end of the 30 days therein referred to was in good working order, and to my satisfaction with respect to insulation, I accordingly enclose herewith a statement of account I have received from Messrs. Glass, Elliot & Co. of the balances, &c. due to them on the completion of their contract, amounting to 30,835 *l.* 5 *s.* 4 *d.* To which sum I consider they are justly entitled.

I have, &c.
(signed) *H. C. Forde.*

The Secretary Board of Trade,
Whitehall, London.

MALTA AND ALEXANDRIA TELEGRAPH.

TABULAR STATEMENT accompanying H. C. Ford's "FINAL REPORT" to the Secretary of the Board of Trade, dated 1st November 1861, giving a Detailed Account of each Section.

No. of Section.	NAME OF SECTION.	Date when Completed.	Length.		Slack.		Depth and Pressure of Water.				Length of Cable over 100 Fathoms.		Length of each Description of Cable laid in each Section.		
			Over Water.	Cable.	No. of Knots.	Per Cent.	Maximum.		Minimum.		Mean.		Shore end No. 1.	Shore end No. 2.	TOTAL.
							Fathoms.	lbs. per square inch.	Fathoms.	lbs. per square inch.	Fathoms.	lbs. per square inch.			
1	Malta to Tripoli -	30 May 1861	Knots. 223-50	Knots. 230-20	Knots. 6-70	Knots. 3-00	420	1,121	50	133	133	355	Knots. 8-00	Knots. -20	Knots. 230-20
2	Tripoli to Benghazi -	28 Sept. "	Knots. 497-00	Knots. 506-94	Knots. 9-94	Knots. 2-00	150	400	25	67	71	189	Knots. 12-00	Knots. -54	Knots. 506-94
3	Benghazi to Alexandria -	23 Sept. "	Knots. 582-00	Knots. 592-98	Knots. 10-98	Knots. 1-89	115	307	13	35	47	125	Knots. 131-32	Knots. 1-85	Knots. 592-98
1, 2 & 3	Malta to Alexandria -	28 Sept. 1861	Knots. 1302-50	Knots. 1330-12	Knots. 27-62	Knots. 2-12	-	-	-	-	71	-	Knots. 151-32	Knots. 2-59	Knots. 1330-12
No. of Section.	NAME OF SECTION.	ELECTRICAL TESTS.													
		GUTTA PERCHA RESISTANCE PER KNOT.													
		Paying out.		Thirty Days Tests.				Comparison of Insulation to Conductivity.							
		Before.	After.	Per Centage of Improvement during Laying.	First Day.	Last Day.	Variations.		No. of Words per Minute, each Word Five Letters.	Battery Power Number of Elements.	Approximate Rate of Transmission.		Gutta Percha Resistance of whole Section, Average of 30 Days.	Copper Resistance of whole Section, Average of 30 Days.	Ratio of Gutta Percha Resistance to Copper Resistance.
							Improvement.	Falling off.							
1	Malta to Tripoli -	Millions of units. 161	At end of 1 Min. 290	Per centage. 80-12	Millions of units. 253	At end of 1 Min. 250	Per cent. 1-186		No. 25	No. 3			Units. 1,060,000	Units. 880	1,205 : 1
2	Tripoli to Benghazi -	87 148 1 Min. 2 Min.	318 225 1 Min. 2 Min.	265-52 52-03 1 Min. 2 Min.	201 1 Min.	182 1 Min.	- 9-059		15	3			382,643	1,904	201 : 1
8	Benghazi to Alexandria -	57 75 1 Min. 2 Min.	107 120 1 Min. 2 Min.	87-72 60-00 1 Min. 2 Min.	139 1 Min.	158 1 Min.	- 13-669		12	4			251,264	2,210	113 : 1

REPORT from Dr. *Esselbach*, accompanying *C. H. Forde's* Report to the Board of Trade, dated Malta, the 1st November 1861.

Malta, Dunsford's Hotel,
Sir, 31 October 1861.

FTER having received yesterday per telegraph the different stations final information about tests up to the 28th instant, I beg to lay the wing report before you, subject to confirmation and completion by letter of the telegrams led to, which, however, I consider correct, and completion of which will mostly concern questions of less direct importance.

pecting figures, I beg to refer in most instances, and once for all to the accompanying grams:

All three sections are in perfect working order.

The insulation and resistance is and was from beginning of different amount in the three sections, as the accompanying diagrams show. The Malta-Tripoli cable being the best, the Tripoli-Benghazi coming next to it and the Benghazi-Alexandria being lowest, all three cables are in good condition, and since submersion, of higher insulation than the standard fixed by Messrs. Siemens, Schuckert & Co.

All three cables tested after submersion equal positive and negative currents, and did so not after the first, but also after the third and 28th minutes of the tests with perfect regularity.

The polarization (electrification) was also for all three cables throughout, normal during the 30 minutes, and equal for positive and negative currents, which is of great importance in judging the results.

On two occasions (neg. ins. Malta, 30 August; pos. ins. Alexandria on 30th September), an extraordinary polarization was observed, but in both cases the tests from the other end of the same cable were perfectly normal as well as the tests of it on days before and after from both ends.

I do not therefore attach much importance to these exceptions, as they were in all probability caused by something external, although I do not justify to omit them altogether.

The resistance of the copper wire was found normal. The measuring of it was to a high degree embarrassed by earth currents, which will be detailed extensively in the Appendix; but it was nevertheless possible to arrive by alternate tests of positive and negative currents at mean results of sufficient exactness to prove that the resistances of the copper wire in units are following:

1st section, 3,827 per knot.

2nd " 3,758 "

3rd " 3,700 "

The resistance of the copper wire varies not much, but we cannot overlook a steady increase of 1 per cent. in each of the sections corresponding to an increase of temperature of $4\frac{1}{2}$ degrees, almost contrary to what would be expected in the middle of the season.

I have not been able to discover any relation. 0.48.

between the curves of insulation and those of the variation of temperature of the cables as represented directly by their copper resistance, especially I did not find any traces in them, which would in themselves explain the marked change of the Tripoli-Benghazi, nor the improvement of the Alexandria Cable.

7. If the specific resistance of the copper wire could be taken as equal throughout, and at $3\cdot7$ (at 20° cel.) 69° Fahrenheit, the relative resistance of the lines as above-mentioned would indicate the average temperature of the cables to be

1st section, 75 degrees Fahrenheit.

2nd " 71.6 "

3rd " 68 "

but this statement is improbable, as it represents the section in the deepest water at the highest temperature, and that in the shallowest water at the lowest; this, if true, would tend to make the difference in the specific insulation of the three lines still wider.

I am glad to find sufficient evidence in Messrs. Siemens former tests of the cables, to make it probable that the average specific resistance of the copper of the three lines is sufficiently different from each other to account for the above difference without in any way recurring to temperature.

The slighter difference of continuity can be due equally to,

1. the length being actually greater than given.
2. A higher specific resistance.
3. A higher temperature.

On account of uncertainties about the length of cables, Messrs. Siemens had often been unable to arrive at definite results.

If the length of a cable is actually less than what has been stated, the specific insulation would appear worse, as the temperature is supposed to be lower from the smaller copper resistance, which in reality is due to the shorter length. At the same time it appears better in the reduction to knots with the wrong length; but the first error will overbalance the other in this case, and *vice versa*.

Too many opportunities are not offered to science whereby information respecting submerged cables can be obtained, that any of them can be spared, it is therefore necessary that the greatest care should be taken in future to ascertain the specific resistances, and with that end in view, the exact indication of the lengths should be enforced by the specification.

A certain increase of insulation resistance was to be expected from the pressure after submersion, viz., 2 per cent. for every additional 100 lbs. per square inch, according to the official tests of this cable at the Gutta Percha Works.

According to the following average depths in which the three cables are laid (with which you have kindly furnished me at rough averages) the average pressures on the cables are stated opposite to them as well as the per-centage of improvement

App. No. 10. ment in insulation to be expected after submersion.

	Depth in Fathoms.	Pressure in lbs. per Square Inch.	Improvement experienced as due to this Pressure.
1st Section -	133	347	7 o/o
2nd „ -	85	255	5 o/o
3rd „ -	33	99	2 o/o

All three tables improved by submersion in a much higher degree.

8. In all three lines a decided steady variation of the insulation was observed during the 30 days, as the curves show. They took place on different series of days in the three lines, viz., in the first section on and about the 18th October; in the second section on and about the 21st; and in the 3rd section during the whole of the above time.

As the tests from both ends of each line corroborate each other minutely, whilst on the same days, and tested with the same instruments, the neighbouring lines showed different variations, it is out of the question to look for local causes in the stations or to the weather (which was stormy and damp at Malta and Tripoli, but fine at Benghazi during the middle and end of October) as having influenced the instruments and connections. There was further no variation of temperature to account for it. I am further convinced that we have not to look to earth currents for an explanation of this, and I avail myself of this opportunity to state so at once in order to negative, if possible, an addition to the list of “mysterious” causes. There is no doubt but that these variations take place in the insulation of a line itself, and I don’t see that it can be much otherwise, considering that we deal with the electric quality of a vegetable material; that is to say, with an organic substance from which numerically such constant physical qualities are never expected as from inorganic mineral substances, and which is reduced here to numerical tests with the most delicate of nature’s forces. These changes may be due to just as periodical a cause as if they were due to temperature, and like the latter be perfectly harmless; in fact they are not without precedent in the former official tests. But they argue the necessity of settling in a future specification what limits are to be allowed for them without taking them for indications of a dangerous weakness—of a fault.

9. After stating these facts, which apply to the three cables in general, you will now permit me to give a short resumé of the tests of each of the sections.

No. 1 Section.—*Malta to Tripoli.*

The Malta-Tripoli section being the best, had the advantage of being brought out and submerged in the earlier part of the year. The cable showed in the voyage out great variations in resistance, but the electrification was regular; the variations in resistance are satisfactorily explained by the temperature and the remarks about the water in tanks. This cable in general tested lower than the aft hold cable of the same ship (first part of Benghazi-Tripoli section) but its temperature was also as a general rule sufficiently higher to account for this. On the final tests at Malta it polarized less than the aft hold cable. After it

had been laid in May we had opportunity to test it from the 23rd of August till the 28th October only interrupted by operations with another cable in the latter half of September. It showed about 15 per cent. improvement since tested last on board ship, and remained rather equal during the time with the sole exceptions of the tests of 18 October, already alluded to in the preceding paragraph.

The tests of this section from Tripoli are throughout about 8 per cent. lower than those from Malta which probably is due to an unreduced constant difference in the instruments at the two ends, but it certainly has nothing to do with the insulation.

No. 2 Section.—*Tripoli to Benghazi.*

10. The first portion of this cable came out at the same time with the Malta-Tripoli cable, on board “Malacca,” in April. It was tested in the voyage out, and at Malta, principally by Mr. Pütsch. The same remarks apply to it as to the forehold cable mentioned in the foregoing paragraph. After it had been laid down (early June) we obtained an opportunity to test it from the 23rd August till 20th September (when the operations for completing the unfinished section began).

During this time it showed a high resistance but also changes, as alluded to in paragraph especially about the 9th September.

The second portion of this cable is entitled to greatest attention. It was put on board “Malacca” early in August, at Greenwich.

On the 13th August, after several miles had been joined to it, it fell suddenly one-third in insulation; that fact was only discovered after a second day, but from Messrs. Siemens report (21st August) it appears that the water did not reach the weak spot until after that period.

As the cable did not go up during the following week, it was cut in two pieces. These pieces tested, as is shown by the blue and red lines. The suspicious part tested fully one-third lower than the other. In this state the cable left England and Messrs. Siemens and yourself protested against its leaving.

In Malta, the cable was again tested by me (per my report, dated 17th September). The two pieces had both fallen in insulation, according to temperature. But the suspicious piece was still in the same proportion lower than the other. Besides this, it polarized more than double much with positive as with negative currents.

As the contractors did not share our opinion we requested only one cut to settle the question. It was refused, and the cable was laid in its third condition, joined to a four times greater length of sound cable; the doubtful symptoms disappeared in the new average. The tests of the other cable in that ship showed nothing uncommon.

The whole section, after being completely tested, showed a resistance above the standard.

No difference was observed at either end at any time between the positive and negative tests, or their polarization.

The polarization remained also in proportion to the variation of its resistance on and during 21st October.

Not the slightest change is observable between the tests from the two ends, which speaks solely and chiefly in favour of Siemens’s instruments; it does credit to the intelligent way in which they were handled by Messrs. Hirz and Sonneman, and

Mr. Pütsch.

. Pütsch, at Alexandria (to which section this sole remark also applies).

No. 3 Section.—*Benghazi to Alexandria.*

The same applies to the first easterly half of Alexandria-Benghazi section, on which I reported to you on the 4th July last.

It tested unduly low before being laid down, though without signs of a direct fault, but so as to call into requisition the most delicate testing by submersion; and it was understood, I believe, that you only consented to its being paid in consideration that it was to be laid in very shallow water, and that a cut would be easier obtained after paying out, and would involve less risk to the cable than what might have arisen from the delay attending the uncoiling of it under the circumstances in Alexandria.

When Mr. Pütsch tested that cable again after six months, on the 20th September, it was found sufficiently improved and above the standard; speak here of Mr. Pütsch's test on the 20th September, when the buoyed end had been taken up and the end safely insulated.

On the 5th September the cable tested low, but was contended, and seems to be probable, that the end had not been well sealed. (*See Appendix.*)

This second half of the cable tested normal. The tests, during the 30 days of this section, can only be looked at with satisfaction, as they show a steady improvement in the cables.

It must be deeply regretted that the opportunity was lost to insure us about the state of a few miles of the middle (or No. 2) section.

With this exception the three cables can, I believe, fairly be called sound, and in as perfect and satisfactory a state as any other laid down up to the present day.

I have the satisfaction to state that Mr. Laws agrees with me as to the above in detail, and in general.

It is with deep regret that I sign this report in my own, and not in the name of Messrs. Siemen's, Halske, & Co., but every one will know sufficiently of the above contests to render unto Cæsar the things which are Cæsar's.

Yours, &c.

Dr. Esselbach, Chief Electrician
of the Government Staff on this
Expedition.

To H. C. Forde, Esq.,
Government Engineer to Malta-Alexandria
Telegraph.

App. No. 10.
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Appendix, No. 11.

PAPERS handed in by Mr. James Russell.

THE COMPANY'S FLEET.—LINES OF THE INDIAN OCEAN.

Impératrice -	-	-	screw	-	-	500 horse power.	La Bourdonnais -	-	-	screw	-	-	280 horse power.
Donnai -	-	-	"	-	-	500 "	Meïnam -	-	-	"	-	-	280 "
Cambodge -	-	-	"	-	-	500 "	Dupleix -	-	-	"	-	-	280 "
Tigre -	-	-	"	-	-	500 "	Emirne -	-	-	"	-	-	240 "
Alphée -	-	-	"	-	-	400 "	Mozambique -	-	-	"	-	-	240 "
Erymanthe -	-	-	"	-	-	400 "	Capitole -	-	-	paddle	-	-	200 "

Messageries Impériales.—Services of the Indian Ocean.

OUTWARD.						RETURNING.					
		Arrivals.		Departures.				Arrivals.		Departures.	
		Days.	Hours.	Days.	Hours.			Days.	Hours.	Days.	Hours.
1. THE HONG KONG LINE.—A departure on the 19th of each month.											
Marseilles	-	-	-	19	2 p.m.	Hong Kong	-	-	-	25	2 p.m.
Messina	-	21	-	21	-	Saigon	-	29	2 p.m.	30	2 p.m.
Alexandria	-	25	-	-	-	Singapore	-	3	9 a.m.	4	9 a.m.
Suez	-	-	-	27	4 p.m.	Point de Galle	-	10	11 p.m.	12	6 a.m.
Aden	-	3	9 a.m.	3	9 p.m.	Aden	-	21	2 p.m.	22	2 a.m.
Point de Galle	-	13	5 a.m.	14	5 a.m.	Suez	-	27	7 p.m.	-	-
Singapore	-	20	7 p.m.	21	7 p.m.	Alexandria	-	-	-	29	noon.
Saigon	-	24	2 p.m.	25	2 p.m.	Messina	-	3	-	3	-
Hong Kong	-	29	2 p.m.	-	-	Marseilles	-	5	10	-	-
2. CALCUTTA BRANCH LINE.—A departure on the 13th of each month.											
Point de Galle	-	-	-	13	-	Calcutta	-	-	-	3	8 a.m.
Pondicherry	-	15	-	15	-	Madras	-	6	-	7	-
Madras	-	16	-	16	-	Pondicherry	-	7	-	7	-
Calcutta	-	20	-	-	-	Point de Galle	-	10	-	-	-
3. THE BATAVIA BRANCH LINE.—A departure on the 21st of each month.											
Singapore	-	-	-	21	4 p.m.	Batavia	-	-	-	30	8 a.m.
Batavia	-	24	5 a.m.	-	-	Singapore	-	2	9 p.m.	-	-
THE SHANGHAI BRANCH LINE.—A departure on the 28th of each month.											
Hong Kong	-	-	-	30	2 p.m.	Shanghai	-	-	-	20	6 a.m.
Shanghai	-	4	6 a.m.	-	-	Hong Kong	-	23	10 p.m.	-	-
THE JAPAN BRANCH LINE.											
Shanghai	-	-	-	5	6 a.m.	Yokohama	-	-	-	13	6 p.m.
Yokohama	-	10	1 a.m.	-	-	Shanghai	-	18	1 p.m.	-	-
THE MAURITIUS LINE.—One departure monthly.											
Depart from Marseilles 9th of each month.						Depart from Mauritius 18th of each month.					
Marseilles	-	-	-	9	2 p.m.	Port Louis (Maur)	-	-	-	18	4 p.m.
Messina	-	11	2 a.m.	11	10 a.m.	St. Denis (Réunion)	-	19	5 a.m.	19	5 p.m.
Alexandria	-	15	2 a.m.	-	-	Mahé (Seychelles)	-	24	5 a.m.	24	5 p.m.
Suez	-	-	-	17	4 p.m.	Aden	-	1	4 a.m.	1	4 p.m.
Aden	-	23	9 a.m.	23	6 p.m.	Suez	-	7	9 a.m.	-	-
Mahé (Seychelles)	-	30	5 a.m.	30	4 p.m.	Alexandria	-	-	-	9	3 p.m.
St. Denis (Réunion)	-	5	4 a.m.	5	4 p.m.	Messina	-	13	7 a.m.	13	noon.
Port Louis (Maur)	-	6	5 a.m.	-	-	Marseilles	-	15	12 p.m.	-	-

NOTES relating to the SERVICES of the INDIAN OCEAN.

—*Lines of Hong Kong, Shanghai, and Japan.*

THE dates and hours of departure from Marseilles, out, and from Yokohama, Shanghai, and Hong Kong, returning, are imperative.

Nevertheless, in case of unforeseen slowness of passage, and such as to compromise the fixity of the date of departure, the duration of stoppage at Yokohama, Shanghai, and Hong Kong returning, shall be determined by common agreement between the mail-master on board, the commander of the packet, and the Company's agent, that such stay should not exceed the delay provided by the time-tables.

During the south-west monsoon, that is to say, during the months of April, May, June, July, August, and September, the departures from Yokohama, from Shanghai, and from Hong Kong, on the return voyage, are exceeded by two days, unless the regulated duration of stoppage has not been exhausted.

Saving the exceptions mentioned in sec. 1, the duration of the stoppages in the ports of call indicated in the time-tables is the maximum which may be shortened by common agreement between the mail-master on board, the commander of the packet, and the Company's agent. This agreement affords chiefly the power of profiting by the delay which will result from the periodical return of the months of thirty-one days, as well as by every gain of time obtained in navigation, saving the date of imperative date of departure. However, the normal stoppage of 24 hours provided by the port-of-call of Saigon must only be shortened by the authority of the Governor of the Colony.

In case of delay in arrival at Shanghai and Hong Kong in the return voyages of packets coming from Yokohama and Shanghai, the maximum stay shall be five days beyond the regulated date of departure.

In case of delay in the arrival at Point de Galle the packet coming from Calcutta, the maximum stay shall be three full days beyond the regulated date of departure.

The packet coming from Hong Kong to Shanghai must not leave Hong Kong till after the arrival of the packet coming from Suez. The packet coming from Shanghai to Yokohama must not leave Shanghai till after the arrival of the packet coming from Hong Kong.

2.—*Lines from Point de Galle to Calcutta.*

The date of departure from Calcutta on the return voyage towards Point de Galle is alone

imperative. The duration of the rests in the ports-of-call is the maximum, which the Company reserves the power of shortening. The packet of the Calcutta line must not, in any case, leave Point de Galle till after the arrival of the packet coming from Suez.

3.—*Line from Singapore to Batavia.*

The date of departure from Batavia on the return voyage towards Singapore is alone imperative. The packet of the Batavia line does not quit Singapore, in any case, till after the arrival of the packet coming from Suez.

During the south-west monsoon, the dates of departures from Batavia may be advanced two days; but there must always be, between the arrival at Batavia from Singapore and the departure from Batavia for Singapore, a delay sufficient for the accomplishment of commercial operations, provided always that such delay does not exceed 48 hours.

4.—*Lines from Marseilles to La Réunion and the Mauritius.*

The dates and hours of departure from Marseilles to the Mauritius and from the Mauritius, on the return voyage, are alone imperative.

The duration of the stoppages in the ports-of-call indicated in the time-table is the maximum which the Company reserves the power of shortening in the interest of the acceleration of postal navigation. It has chiefly the power of profiting by the gain of time, which would result from the periodical return of the months of 31 days, and of every gain of time obtained in navigation.

If the state of the roadstead at the port-of-call of La Réunion, either going or returning, should not permit vessels to intercommunicate with the shore during the stay there, the passengers, mails, and goods should be transhipped to the tender (or port-boat) of the colony.

The stoppage at Mahé, on the outward voyage, does not take place during the south-west monsoon, that is to say, during the months of June, July, and August.

In case of delay in the arrival at Suez of the packet from the Mauritius, the departure of the packet from Alexandria would be retarded. This packet would leave Alexandria on the 12th at latest, if at 3 p. m. on the 12th, the arrival of the packet from the Mauritius (at Suez) should not have been signalled by telegraph.

Appendix, No. 12.

App. No. 12.

CORRESPONDENCE received from the Foreign Office, and laid before the Committee by the Clerk of the Committee.

Sir,

Foreign Office, 26 April 1866.

April 11.

I AM directed by the Earl of Clarendon to transmit to you, for the information of the East India Telegraph Communication Committee, the accompanying copy of a despatch which has been addressed by the Ottoman Minister for Foreign Affairs to the Ottoman Ambassador at this Court, relative to the working of that portion of the Indo-European telegraph which passes through the Turkish dominions.

I am, &c.

(signed) *E. Hammond.*

The Chairman of the
East India Telegraph Communication Committee,
House of Commons.

Sublime Porte.—Ministère des Affaires Étrangères.

Monsieur le Ambassadeur,

Le 11 Avril 1866.

J'AI reçu la dépêche que Votre Excellence a bien voulu m'adresser le 1^{er} Mars, N° 2395/32, pour me transmettre, avec un article de fond du "Times," le compte-rendu d'une discussion à la suite de laquelle la Chambre des Communes a adopté une proposition ayant pour objet la nomination d'un Comité chargé de s'enquérir de la manière dont actuellement est desservie la ligne télégraphique entre l'Angleterre et les Indes, à travers la Turquie.

Le Gouvernement Impérial ne peut que se féliciter de la réalisation du projet conçu par la Chambre des Communes. Il le désire d'autant plus, qu'il est assuré d'avance que le Comité d'enquête dont il s'agit trouvera, à sa grande surprise, les choses établies sous un tout autre point que celui dans lequel elles sont envisagées en Angleterre.

Par la déclaration du "Times" même, on croit en Angleterre que les dépêches rédigées en langues étrangères sont reçues en Turquie par des agents ignorant complètement de ces langues, et n'étant familiers seulement qu'avec la langue Turque. Cette supposition est d'autant moins fondée, que je n'hésiterais pas à déclarer formellement que de toutes les administrations que traversent les correspondances des Indes, l'Administration Ottomane est une des celles sur le réseau de laquelle ces mêmes dépêches subissent le moins de détériorations. Il m'est très-facile d'appuyer ce qui précède par des preuves évidentes qui sont à la disposition de la Direction Générale des Lignes Télégraphiques de l'Empire.

Il est notoire, en outre, qu'en dehors du personnel international de l'administration affecté au service de la correspondance Indo-Européenne, et lequel n'est pas complètement étranger à la langue dans laquelle cette correspondance est conçue, des employés Anglais ont été installés dans les principales stations à translation de l'empire, où les dépêches Indo-Européennes peuvent être reçues et transmises.

Quant aux retards, variant de cinq à 31 jours, et qui font l'objet principal de toutes les discussions et réclamations dont il s'agit, je suis heureux de pouvoir affirmer que, depuis l'époque de l'inauguration de la correspondance Indo-Européenne à travers la Turquie, alors que la grande ligne de l'Asie ne faisait que commencer à fonctionner, et qu'elle se trouvait encore dans des conditions peu satisfaisantes, malgré les perturbations produites sur diverses sections de son parcours par des hivers rigoureux et d'autres causes majeures, aucune dépêche n'a subi un retard aussi long que celui que signale le "Times."

Ces irrégularités aussi regrettables concernent les correspondances Indo-Européennes qui empruntent les lignes Russes.

En Angleterre, les expéditeurs de ces télégrammes ignorent l'existence d'une autre voie que la voie Ottomane, et attribuent naturellement le tort à l'Administration Impériale. Je me plais en même temps à vous informer qu'il résulte des renseignements fournis tout récemment à la Direction Générale par Monsieur le Délégué des Télégraphes Indo-Européens à Constantinople, que du 1^{er} au 12 Février dernier, sur 405 dépêches qui ont été transitées par les lignes Ottomanes, le plus grand délai subi par elles ne dépasse pas en moyenne plus d'un jour, 19 minutes et 40 secondes; tandis que, par contre, sur 128 télégrammes dirigés par les lignes Russes pendant le même intervalle, le temps moyen employé pour leur transmission atteint le chiffre de 17 jours et huit minutes.

En dehors de cet avantage des lignes Ottomanes sur les lignes Russes, depuis à peu près trois mois et à de rares exceptions près, les dépêches provenant et à destination des Indes, sont

sont transmises directement de Fas à Alexinatj, c'est-à-dire, sont données d'une frontière de la Turquie d'Asie à une frontière Ottomane de l'Europe, et *vice-versâ*, sans séjourner dans aucun poste intermédiaire de l'empire.

À la suite de tous ces avantages évidents et fondés que présentent les lignes du réseau Ottoman, dans le but de rendre à l'Administration Impériale tout le mérite qui lui appartient, et qu'on ne lui reconnaît pas, la direction des télégraphes de l'empire a cru opportun d'adresser aux principales administrations télégraphiques de l'empire, une note circulaire dans laquelle elle leur fournit toutes les informations de nature à faire acquérir à l'Administration Impériale toute la considération qui lui est due et à faire éviter au public de lui attribuer injustement des irrégularités qui ne proviennent pas de son fait, mais qui sont imputables aux lignes des autres administrations.

En vous priant, Monsieur l'Ambassadeur, de vous énoncer auprès de qui de droit dans le sens des observations qui précèdent, pour rectifier, à l'honneur de notre administration télégraphique, toute supposition erronée à son égard, je saisis l'occasion de vous réitérer l'assurance de ma haute considération.

(signé) *Aali.*

Appendix, No. 13.

PAPER handed in by Sir M^cDonald Stephenson, 8 May 1866.

App. No. 13.

The following is the STATEMENT referred to in the Evidence.

1. THE object is to establish, under one control and management, telegraphic communication from England to Egypt, India, China, and the Australian Colonies, for the accommodation of the through messages, and of the large local traffic between these distant countries. An independent system of telegraph from Europe to the East will be constructed, by laying submarine cables of the most modern and permanent construction, by establishing new land lines, and by purchasing the rights of existing companies or Governments, or by entering into working arrangements with them.

2. The following is a sketch of the route to be followed. It is proposed that a line of telegraph should be constructed through Europe to the island of Sicily, whence a cable will be laid to the African coast, under a concession granted by the Italian Government, joining the existing Malta and Alexandria cable at Benghazi. In order to meet the large through traffic which will concentrate on this line, it will become necessary to lay a duplicate line as far as Alexandria.

Arrangements should be made with the Telegraph to India Company, to hand over their concessions, as well as their lines between Alexandria, Cairo, and Suez.

From Alexandria two distinct lines should branch off to India, one from Suez to Cosseir and Suakin in the Red Sea, or by land lines up the Valley of the Nile, by permission of H.H. the Viceroy of Egypt, to Suakin or Massowah, and thence by submarine cables *viâ* Aden and the southern coast of Arabia to Kurrachee and Bombay; and the other, or alternative route, by land lines through Syria, joining the existing Persian Gulf Line.

3. Arrangements will have to be made to secure independent wires between Bombay, Calcutta, and Rangoon, and to carry out the conditions of an agreement which were settled two years since with the East Indian, the Great Indian Peninsula, and other Indian railway companies, for placing separate commercial wires on their posts from Bombay to Calcutta, Madras, Allahabad, Benares, Delhi, &c. It is also believed that the other land lines in India may be hereafter worked under one administration on equitable terms, to the great advantage both of the local and through telegraphic intercourse of the country.

4. From Rangoon, the eastern terminus of the Indian land lines, a cable should be laid to Singapore, whence submarine lines will diverge in two directions, one branch proceeding, *viâ* Saigon, to Hong Kong and Shanghai, and the other passing through Java to our colonies in Australia.

5. With a view of embracing the entire system of telegraphy to the East, it is proposed to undertake, if approved by the Secretary of State, India in Council, and the Government of India, a lease of, and eventually to purchase on equitable terms, the Persian Gulf Line, under such arrangements with the Ottoman Government as secure to the public the same accuracy and rapidity in the transmission of messages as *viâ* England, thereby providing the public with a double alternate route to all parts of the East.

6. The whole system comprises about 12,000 miles of submarine cable, and about 8,000 miles of land line.

7. Great advantages would accrue to the public from the establishment of a responsible company of sufficient magnitude to embrace under management a direct system of communication between Europe, India, China, and Australia. It would ensure at all times and at a minimum cost the punctual and accurate transmission of messages between these distant and important communities, and thereby give to the electric telegraph a value hitherto unattained.

8. The present condition of telegraphic communication with India is most unsatisfactory. Messages usually occupy from two to ten days in their transmission, and arrive in a mutilated and frequently unintelligible form; from the remoteness of different countries and languages through which the messages pass, it is impossible to obtain an explanation or redress, while the cost is too high and the distance too great to admit of correction being obtained by repetition.

9. Under a well organised system the average time of transmission of a message between England and Australia ought not to exceed 48 hours, and between London and Calcutta not more than half that time.

10. The route which should be followed is almost entirely in shallow water, where the cable can be at once repaired in case of defect, and a section need exceed 700 miles in length.

11. Great advances have been made, and valuable experience gained of late years in the construction of submarine telegraphs; and as is shown by the Malta and Alexandria and the Persian Gulf Lines, and the many existing cables between England and the Continent, there is no difficulty in ensuring their electrical perfection and mechanical durability, nor will there be any difficulty in repairing them when injured.

12. It is calculated that the whole system may be completed in four years.

Macdonald Stephenson

Appendix, No. 14.

PAPERS handed in by Mr. Knight, 8 May 1866.

App. No. 14.

RETURNS relating to CUNARD STEAMERS between *England* and *America*.

OUTWARD MAILS.

RETURN of all STEAMERS of the CUNARD LINE carrying MAILS between *Liverpool* and *New York*, exhibiting the Duration of each Passage, for the Year 1861.

Date of Departure.	Name of Packet.	Duration of Passage.
1861 :		<i>Days. Hours.</i>
5 January - - -	Asia - - -	13 18 $\frac{1}{2}$
19 " - - -	Arabia - - -	13 8 $\frac{1}{2}$
2 February - - -	Africa - - -	14 21
2 March - - -	Arabia - - -	14 8 $\frac{1}{4}$
16 " - - -	Africa - - -	14 19 $\frac{1}{4}$
30 " - - -	Persia - - -	9 20 $\frac{1}{4}$
13 April - - -	Asia - - -	11 21 $\frac{1}{4}$
27 " - - -	Africa - - -	12 3
11 May - - -	Persia - - -	10 8 $\frac{3}{4}$
25 " - - -	Australasian - - -	11 6 $\frac{1}{4}$
8 June - - -	Africa - - -	11 20 $\frac{3}{4}$
22 " - - -	Persia - - -	10 19 $\frac{1}{4}$
6 July - - -	Asia - - -	11 16 $\frac{1}{4}$
20 " - - -	Africa - - -	12 1
3 August - - -	Persia - - -	10 20 $\frac{1}{4}$
17 " - - -	Asia - - -	11 23 $\frac{3}{4}$
31 " - - -	Africa - - -	12 5 $\frac{1}{4}$
14 September - - -	Persia - - -	10 16 $\frac{3}{4}$
28 " - - -	Asia - - -	12 21 $\frac{1}{4}$
12 October - - -	Africa - - -	13 4 $\frac{1}{2}$
26 " - - -	Persia - - -	9 22
9 November - - -	Asia - - -	12 6 $\frac{3}{4}$
23 " - - -	Africa - - -	14 21 $\frac{3}{4}$
7 December - - -	America - - -	16 23
21 " - - -	Asia - - -	13 0
Voyages. 25)		311 22 $\frac{3}{4}$
Average Length of Voyage - - -		12 11 $\frac{1}{2}$
Average Detention at Queenstown - - -		0 6
Under Steam - - -		12 5

Distance, 3,100 miles. Average Speed, 10·58 knots.

HOMEWARD MAILS.

RETURN of all STEAMERS of the CUNARD LINE carrying MAILS between *New York* and *Liverpool*, exhibiting the Duration of each Passage, for the Year 1861.

Date of Departure.	Name of Packet.	Duration of Passage.
1861 :		<i>Days. Hours.</i>
2 January - - -	Persia - - -	10 14
16 " - - -	Australasian - - -	11 3 $\frac{1}{2}$
30 " - - -	Asia - - -	11 23 $\frac{1}{2}$
13 February - - -	Arabia - - -	11 4 $\frac{1}{2}$
27 " - - -	Africa - - -	11 15
13 March - - -	* Adriatic - - -	9 12 $\frac{3}{4}$
27 " - - -	Arabia - - -	12 10 $\frac{1}{2}$
10 April - - -	Africa - - -	11 13 $\frac{1}{4}$
25 " - - -	Persia - - -	9 22 $\frac{3}{4}$
8 May - - -	Asia - - -	12 9
22 " - - -	Africa - - -	11 13 $\frac{1}{2}$
5 June - - -	Persia - - -	10 15 $\frac{1}{4}$
19 " - - -	Australasian - - -	9 22 $\frac{1}{2}$
3 July - - -	Africa - - -	11 15 $\frac{1}{4}$
17 " - - -	Persia - - -	9 23
31 " - - -	Asia - - -	11 15 $\frac{3}{4}$
14 August - - -	Africa - - -	11 2
28 " - - -	Persia - - -	10 17
11 September - - -	Asia - - -	11 10
25 " - - -	Africa - - -	11 11 $\frac{1}{2}$
9 October - - -	Persia - - -	10 23
23 " - - -	Asia - - -	11 11 $\frac{1}{4}$
6 November - - -	Africa - - -	12 11 $\frac{1}{2}$
20 " - - -	Persia - - -	11 22 $\frac{1}{4}$
4 December - - -	Asia - - -	11 16 $\frac{3}{4}$
20 " - - -	Africa - - -	12 17 $\frac{1}{2}$
Voyages. 26)		293 16 $\frac{1}{2}$
Average Length of Voyage - - -		11 7
Average Detention at Queenstown - - -		0 1
Under Steam - - -		11 6

Distance, 3,100 miles. Average Speed, 11·48 knots.

* Chartered for single voyage, by Cunard Company, to Queenstown only.

AVERAGE SPEED OF THE PERSIA.

HOMEWARDS.

Date of Departure.	Duration of Passage.
1861 :	<i>Days. Hours.</i>
2 January - - - -	10 14
25 April - - - -	9 22 $\frac{3}{4}$
5 June - - - -	10 15 $\frac{1}{4}$
17 July - - - -	9 23
28 August - - - -	10 17
9 October - - - -	10 23
20 November - - - -	11 22 $\frac{1}{4}$
Voyages. 7)	74 17 $\frac{1}{2}$
Average Length of Voyage - -	10 16 $\frac{1}{4}$
Detention at Queenstown - -	0 1
Under Steam - - - -	10 15 $\frac{1}{4}$
Speed - - -	12·15 knots.

OUTWARDS.

Date of Departure.	Duration of Passage.
1861 ;	<i>Days. Hours.</i>
30 March - - - - -	9 20 $\frac{1}{4}$
11 May - - - - -	10 8 $\frac{1}{4}$
22 June - - - - -	10 19 $\frac{1}{4}$
3 August - - - - -	10 20 $\frac{1}{4}$
14 September - - - -	10 16 $\frac{3}{4}$
26 October - - - - -	9 22
Voyages. 6)	62 11 $\frac{1}{2}$
Average Length of Voyage - -	10 6
Détention at Queenstown - -	0 6
Under Steam - - - - -	10 0
Speed - - - 12·91 knots.	

App.No.14-

RETURNS relating to Cunard Steamers between *England* and *America*—continued.

OUTWARD MAILS.			HOMEWARD MAILS.		
RETURN of all STEAMERS of the CUNARD LINE, carrying MAILS between <i>Liverpool</i> and <i>Boston</i> , exhibiting the duration of each passage for the Year 1861.			RETURN of all STEAMERS of the CUNARD LINE carrying MAILS between <i>Boston</i> and <i>Liverpool</i> , exhibiting the duration of each passage for the Year 1861.		
Date of Departure.	Name of Packet.	Duration of Passage.	Date of Departure.	Name of Packet.	Duration of Passage.
1861 :		<i>Days, Hours.</i>	1861 :		<i>Days, Hours.</i>
12 January - -	Niagara - - -	13 17 $\frac{3}{4}$	9 January - -	Canada - - -	12 5 $\frac{1}{2}$
26 " - -	Canada - - -	15 1 $\frac{1}{2}$	23 " - -	America - - -	12 14 $\frac{1}{4}$
9 February - -	America - - -	14 22 $\frac{1}{4}$	6 February - -	Niagara - - -	11 23
23 " - -	Niagara - - -	16 7 $\frac{1}{4}$	20 " - -	Canada - - -	10 18
9 March - -	Canada - - -	15 14 $\frac{3}{4}$	6 March - -	America - - -	11 15
23 " - -	America - - -	12 22	20 " - -	Niagara - - -	14 2 $\frac{1}{2}$
6 April - -	Niagara - - -	14 11 $\frac{3}{4}$	3 April - -	Canada - - -	12 15 $\frac{1}{2}$
20 " - -	Arabia - - -	10 13 $\frac{1}{4}$	17 " - -	America - - -	12 12
4 May - -	Europa - - -	11 8 $\frac{1}{2}$	1 May - -	Niagara - - -	11 22 $\frac{1}{4}$
18 " - -	America - - -	13 7 $\frac{1}{2}$	15 " - -	Arabia - - -	10 11 $\frac{3}{4}$
1 June - -	Arabia - - -	10 18 $\frac{3}{4}$	29 " - -	Europa - - -	11 0 $\frac{1}{2}$
15 " - -	Europa - - -	11 6 $\frac{1}{2}$	12 June - -	America - - -	11 23 $\frac{1}{4}$
29 " - -	Canada - - -	13 6 $\frac{1}{2}$	26 " - -	Arabia - - -	10 21 $\frac{1}{4}$
13 July - -	Arabia - - -	11 13 $\frac{1}{2}$	10 July - -	Europa - - -	12 14
27 " - -	Europa - - -	12 17 $\frac{1}{2}$	24 " - -	Canada - - -	11 8 $\frac{1}{2}$
10 August - -	Canada - - -	12 13	7 August - -	Arabia - - -	10 11
24 " - -	Arabia - - -	11 16 $\frac{3}{4}$	21 " - -	Europa - - -	11 1
7 September - -	Europa - - -	12 10 $\frac{1}{4}$	4 September - -	Canada - - -	10 22 $\frac{1}{4}$
21 " - -	Niagara - - -	15 6	18 " - -	Arabia - - -	11 0 $\frac{1}{2}$
5 October - -	Arabia - - -	12 9 $\frac{1}{4}$	2 October - -	Europa - - -	11 1 $\frac{1}{4}$
19 " - -	Europa - - -	12 21 $\frac{1}{4}$	16 " - -	Niagara - - -	12 5 $\frac{1}{2}$
2 November - -	Niagara - - -	13 16 $\frac{3}{4}$	30 " - -	Arabia - - -	10 23 $\frac{1}{4}$
16 " - -	Canada - - -	12 11 $\frac{1}{4}$	13 November - -	Europa - - -	11 2 $\frac{3}{4}$
30 " - -	Europa - - -	17 6	27 " - -	Niagara - - -	11 17 $\frac{3}{4}$
14 December - -	Niagara - - -	13 23	11 December - -	Canada - - -	11 10 $\frac{1}{2}$
28 " - -	Canada - - -	12 8 $\frac{1}{2}$	25 " - -	Europa - - -	13 4
		Voyages.			Voyages.
		26) 344 19 $\frac{1}{2}$			26) 304 15 $\frac{1}{4}$
Average Length of Voyage - - -		13 7	Average Length of Voyage - - -		11 17
Detention - - -		0 12*	Detention - - -		0 3*
Under Steam - - -		12 19	Under Steam - - -		11 14
Average speed - - - 9·77 knots.			Average speed - - - 10·8 knots.		
* Detention at Halifax, 6 hours.			* Detention at Queenstown, 1 hour.		
Ditto at Queenstown, 6 hours.			Ditto at Halifax, 2 hours.		

Appendix, No. 15.

PAPERS handed in by Mr. Bourdillon, 8 May 1866.

App. No. 15.

(Home Department.—Post Office.—No. 3 of 1866.)

To the Right Honourable Sir *Charles Wood*, Bart., G. C. B., Secretary of State for India.

Sir,

Fort William, 22 February 1866.

WITH reference to your public Despatch, No. 92, dated the 30th of December, and in continuation of the Governor General's telegram, dated the 12th instant, we have the honour to submit, for your consideration, the accompanying letter received from the Director General of the Post Office in India, on the very important question of establishing a weekly mail between England and Bombay.

No. 2753 B, dated
19 February 1866.

2. In this letter Mr. Riddell appears to us to state, with equal force and justice, the position of this question so far as India is concerned. If it is admitted, as it is by the Postmaster General in England (and the point is indeed too clear to leave any room for question about it), that the postal service with India should, in future, be exclusively to Bombay, it is difficult to understand upon what ground it can be seriously maintained that the Indian Post Office should continue to be charged with a portion of the cost of a postal subsidy given to steamers on the line between Suez and Galle for the conveyance of China and Australian mails, or why any subsidy should be given to steamers running between Galle and Calcutta.

3. We are of opinion that there need be no hesitation in undertaking, for the present, on the part of the Government of India, to defray (in addition to a reasonable share of the cost of the service west of Suez, which is used for other than Indian mails), the whole cost of the mail service between Suez and Bombay; the entire sea postage charged on covers between the two countries being in that case of course credited to the Indian Post Office.

4. But we do not consider such an arrangement to be altogether unobjectionable. It would, apparently, be based on the expectation that the service must be carried on at a loss, and if so, we venture to suggest that it would hardly be desired by England that the whole of that loss should fall upon the Indian revenues.

5. It has been well pointed out in Mr. Merivale's letter to the London Post Office of the 5th of October, that the interests of England and India are jointly concerned in this matter. There are, no doubt, thousands in the former country to whom increased facilities for postal communication with India are just as important as they are to their countrymen living in India, and whether we look to the interests of this latter class only, or to the millions from whom Indian revenue is mainly drawn, and who have no direct interest in the matter at all, it would scarcely be generous for England to stipulate that the loss, which might arise from the establishment of a proper and efficient postal service between the two countries, should be borne wholly by the Indian taxpayer.

6. We earnestly trust that this question will receive further and full consideration from the Lords Commissioners of Her Majesty's Treasury, and that some arrangement will be assented to whereby India may obtain the great advantage of a weekly postal service with Bombay without being compelled, at the same time, to pay part of the expense of maintaining another line of communication which is no longer of any service to India.

7. To what an extent the postal service *viâ* Galle has ceased to be of use, even to Calcutta, we showed in our despatch to you on this subject, dated the 23d November.

We have, &c.
(signed) *John Lawrence.*
W. B. Mansfield.
H. S. Maine.
W. Grey.
G. N. Taylor.
W. N. Massey.
H. M. Durand.

Right Honourable Sir Charles Wood, Bart.
&c. &c. &c.

App. No. 15.

Telegram—From Home Secretary, Calcutta, to Chief Secretary, Bombay; dated 12 February 1866.

PLEASE forward to the Secretary of State, by the out-going mail of the 14th, a copy of the following message, despatched this day by telegraph:—

Telegram—From the Governor General, Calcutta, to the Secretary of State for India, London, India Office; dated 12 February 1866.

A REPLY to your Post Office Despatch of 30th December will be sent by next mail. Meanwhile, I desire to submit that, if it is meant to make India pay the whole cost of two additional mails between Suez and Bombay, we should be allowed to make our own arrangements as economically as we can, either by accepting the Messieurs Stearns', or any other offer that may be eligible. The two additional mails are indispensable.

(Post Office.—No. 2753 B.)

From *H. B. Riddell*, Esq., Director General of the Post Office of India, to *E. C. Bayley*, Esq., Secretary to the Government of India; dated 19 February 1866.

Sir,

THE Despatch No. 92, dated the 30th December 1865, from the Right Honourable the Secretary of State for India, transmits, with other correspondence, the decision of the Lords Commissioners of Her Majesty's Treasury on the subject of the proposed weekly postal communication between Great Britain and India, and the recommendation of Her Majesty's Postmaster General that, concurrently with the establishment of a weekly mail, the rate of postage on letters to and from India should be doubled.

2. The Lords Commissioners decline to sanction the increased rates of postage, and also decline to sanction "the charge for postal communication with India, which would be entailed by making the service to Bombay weekly, unless the Government of India will undertake to defray the entire amount of that increase."

3. The first question for the consideration of the Government of India is, therefore, whether the required undertaking should be given. In my opinion the required undertaking may be given without hesitation, as there will be no increase of expense, provided that the service between Suez and India is exclusively confined to Bombay.

4. It is stated in Mr. F. Hill's letter, No. 7642, dated 14th July 1865, that Her Majesty's Postmaster General "fully agrees with Sir C. Wood and the Government of India in the opinion expressed of the advantage of substituting for the present postal service with India a weekly service, and in thinking that that service should be exclusively with Bombay." When a weekly service is established exclusively with Bombay, the steamers between Suez, Galle, and Calcutta would cease to carry Indian mails, and of course the Indian Postal Revenue would cease to pay any portion of any subsidy granted to steamers on those lines; but jointly with Ceylon, Mauritius, the Cape of Good Hope, China, Australia, and Great Britain, would have to defray the cost of the conveyance of the mails between England and Suez; and jointly with Great Britain would pay the cost of the service between Suez and Bombay.

5. If, as I believe to be the case, distinct payments are made to the Peninsular and Oriental Company for the Bombay and Suez, the Mauritius and Suez, the Suez and Calcutta, the Galle and China, the Galle and Australia, the Marseilles and Alexandria, and the Southampton and Alexandria services, there could be no difficulty in fixing the share to be paid by India for the Mediterranean service, and for that between Suez and Bombay, as well as for the transit through Egypt. There can be no ground for imposing on the postal revenues of India any portion of the subsidies paid on lines east of Suez, upon which Indian mails are not conveyed.

6. The subsidy for the line between Calcutta and Galle may be altogether withdrawn, as the line will be useless for postal purposes. The line between Galle and Suez must be continued for the conveyance of the China and Australian mails; and, if the Indian mails are no longer sent by that route, the cost of the Australian and China Mail service will be increased by the sum heretofore paid by India; and it would appear, from the tenor of Mr. Hill's letters, that this consideration has been the ground upon which all connected with India have been so long denied the advantage of a weekly mail to and from England, and even of four mails in the month. It is difficult to understand how the revenues of India can equitably be charged for the maintenance of a service which is useless to India, and which for some time past has acted as an obstacle to a very great public and private improvement. But if, on any ground of Imperial policy, it is considered right to charge upon the revenues of India a portion of the subsidies paid to British mail steamers employed between Australia, China, Ceylon, and Suez, I submit that the charge should be a distinct one, and not be allowed to interfere with the improvement of the postal communications between Great Britain and India. I think that there is reason to hope that if the rate of postage is not raised, and if a weekly mail is granted, the receipts from postage will, before long, cover the whole cost of the service.

7. The

7. The present postal requirements of India, in connection with Great Britain and Europe, will be satisfied with a weekly mail to Bombay. The cost of the Mediterranean lines might be reduced without inconvenience to the public by a reduction in the number of mails sent *viâ* Southampton; and even if this were not done, the additional cost of conveying four mails in the course of a year from Marseilles or Brindisi cannot be serious. Assuming, therefore, for the present, that the cost of conveying the Indian mails to and from Suez and Great Britain remains unaltered, the increased charge on the Bombay and Suez line will be the subsidy paid for 28 additional trips from Bombay to Suez and back in the course of the year, that is for 56 mails.

8. In a previous communication I roughly estimated the probable cost of this service at 5 s. a mile. The tender submitted by the Bengal and Bombay Steam Navigation Company (Limited) asks for about 3 s. 6 d.; but as the proposed rate of speed is low, it may be safe to estimate the cost at a considerably higher rate.

9. The Bombay and Bengal Steam Navigation Company offer to convey the mails between Suez and Bombay for a sum of 500 l. for each mail, that is, for 1,000 l. for each voyage from Bombay to Suez and back. At this rate the annual cost of the service for 52 mails in each direction would be 52,000 l. At the rate now paid to the Peninsular and Oriental Company, the cost would be 69,544 l. 16 s. As the cost of the service between Suez and Great Britain is shared between Great Britain, Egypt, India, Ceylon, Mauritius, China, the Cape of Good Hope, and Australia, the sum chargeable to the Indian service must be much less than half the total expense. I have not the means of ascertaining the actual cost, but do not think that I should under-estimate it in roughly calculating that it would be covered by a sum of 30,000 l. a year.

10. The result of the above calculation is, that I estimate the cost of a weekly postal service between Bombay and Great Britain at about 100,000 l. a year.

11. As the accounts of postage collected on Indian correspondence in England are not available, I cannot state exactly the amount now realised under this head. The whole amount collected in India on account of sea and foreign postage is credited in gross to the English Post Office. The charge of 6 d. per half-ounce single letter consists of 1 d. for Indian inland postage, 1 d. for English inland postage, and 4 d. for sea postage. The sum collected in India and credited to England in the year 1864-5, amounted to 60,000 l., part of which consisted of French and other foreign postage. Of the remainder, one-fifth was English inland postage, the remainder was available to meet the cost of the sea service between India and England.

12. During the same year, 1864-5, the steam postage due by the London Post Office to India was Rs. 1,74,252. 1. 10, representing the Indian inland charge on letters and newspapers. It would appear, therefore, that about 80,000 l. is now collected on the correspondence between India and England, which is available for the payment of the cost of the sea service between the two countries. There can, I think, be little doubt, when Bombay and the whole of India send and receive a weekly mail instead of two in a month, the increase of correspondence will, before long, make up the deficiency. The service will be self-supporting.

13. I should have been glad to have exact accounts on which to base the above estimate, but time will not admit of my attempting to procure them, and I have some confidence that I have not over-estimated the probable receipts.

14. As the proposal to increase the rates of postage has been negatived, I need not discuss that part of the question.

15. With regard to the proposal that the Imperial and Indian Government should each pay half the subsidy, and keep all the postage they collect, I would observe that the arrangement would involve a loss to the Indian revenue, as the number of articles received by post from countries in Europe greatly exceeds the number sent from hence.

16. I fear that I do not rightly comprehend the reason given for the assumption that a decrease in the number of mails sent *viâ* Gibraltar to Egypt would not result in any decrease on the subsidy. Speed is not of material consequence on that line; and if the requirements of commerce between Great Britain and Alexandria are such that steamers would be on the line whether subsidised or not, it seems to me only reasonable to suppose that a very moderate subsidy would be sufficient to induce one of the competing companies at Southampton or Liverpool to time the departure of one steamer a month, so as to suit the requirements of the Post Office; and I fail to comprehend why the same sum should be demanded for the conveyance of 12 mails a year as for 48.

17. The importance of a frequent mail communication between India and England is so great, that I should hope that the Government of India would feel justified in at once taking upon itself the responsibility of establishing a weekly service between Suez and Bombay, and of abandoning, for postal purposes, the Suez and Calcutta line. The correspondence between Great Britain and India may be expected, before long, to defray the whole cost of the service between India and England. Any question as to the sum, if any, to be paid by India for the maintenance of other lines in the Eastern seas is beyond my province; but I hope that the postal interests of the British and Indian public will not be sacrificed to any difference of opinion on this subject. I believe that if not at once, yet in the course of a

App. No. 15.

year or two, the mail service between Bombay and England will be self-supporting; and, if so, its establishment should not be delayed because other lines are a burthen on the revenue.

I have, &c.

(signed) *H. B. Riddell.*

Director General of the Post Office of India.

(Bombay.—Public.—No. 10 of 1866.)

Sir,

India Office, 31 March 1866.

Para. 1. I HAVE considered in Council your letter, dated 27th January (No. 7) 1866, forwarding correspondence on the subject of an offer made by Messrs. Stearns, Hobart & Co. on behalf of the Bombay and Bengal Steamship Company, to carry two additional mails every month between Bombay and Suez for a subsidy of 20,000 rupees a month, and strongly recommending that this tender be accepted for one year.

2. A Committee of the House of Commons has just been appointed to inquire into the whole subject of telegraphic and postal communication between India and England, and I trust that the deliberations of the Committee may result, at no distant period, in that revision and extension of the postal service which is so much desired by all parties connected with India.

3. But, in the meantime, I am not prepared to sanction the proposal you have now submitted to me.

I have, &c.

(signed) *De Grey and Ripon.*

His Excellency

The Honourable the Governor in Council,
Bombay.

Sir,

India Office, 5 May 1866.

WITH reference to Mr. Hill's letter, dated 21st December last, communicating the decision of the Lords of Her Majesty's Treasury on the subject of establishing weekly postal communication between England and India *via* Bombay, I am directed by the Secretary of State for India in Council to acquaint you that a copy of the correspondence which took place with Her Majesty's Post Office in the course of last year, on the subject in question, was transmitted for the information of the Government of India; and I have now to forward, for the information of Her Majesty's Postmaster General, the accompanying copy of a letter from the Government of India, with its enclosures, relating to the present position of the question at issue.

It will be observed that the Government of India continue to urge the establishment of the proposed additional service *via* Bombay, and express the hope that the subject will receive such further consideration from the Lords of Her Majesty's Treasury as will result in the establishment of a weekly postal service with Bombay, and that India may, at the same time, be relieved from the necessity of paying part of the expense of maintaining the line of postal communication *via* Galle, which is no longer of any public service.

The views of the Secretary of State for India in Council have already been fully and repeatedly expressed on this important subject; but as this is the first opportunity which has occurred of stating his opinion on the subject, as presented in Mr. Hill's letter of the 21st December last, I am directed by Earl de Grey to remark that, considering the question of an increase of the rates of postage to have been set at rest by the decision of the Lords of Her Majesty's Treasury as therein communicated, his Lordship is not prepared to sanction, at the sole charge of India, the establishment of the additional steamers to and from Bombay which, under existing arrangements, would be required to maintain a weekly mail communication with India by that route.

Earl de Grey, in accordance with the wishes of the Government of India, requests that the subject may again be brought by Lord Stanley of Alderley to the early consideration of the Lords of the Treasury, and that their Lordships may be moved to consent to such a re-arrangement of the postal service with India as may lead to a removal of existing anomalies and provide for the desired changes and extensions in the service on fair and equitable terms.

I am, &c.

(signed) *Herman Merivale.*

The Secretary, General Post Office.

Post Office, No. 3 of
1866.

(India.—Public.)

App. No. 15.

Sir,

India Office, May 1866.

Para. 1. I HAVE considered in Council your letter, dated 22nd February (No. 3) 1866, forwarding, with reference to Sir C. Wood's Despatch, dated 30th December (No. 92) 1865, a letter from the Director General of the Post Office in India, on the present state of the question of establishing a weekly mail between England and India, *via* Bombay.

2. The subject is, as you are aware, much complicated by existing arrangements; but I shall not fail to urge on Her Majesty's Postmaster General and on the Lords of Her Majesty's Treasury the importance of putting an end to existing anomalies, and of providing means of extended postal communication between England and India on fair and equitable terms.

3. A Committee of the House of Commons has recently been appointed to consider the whole subject of postal and telegraphic communication between the two countries, and, pending the result of the deliberations of the Committee, I cannot sanction the adoption of any measure which would involve additional charges to be borne exclusively by the revenues of India.

His Excellency

The Right Hon. the Governor General of India in Council.

(No. 7 of 1866.—General Department.)

To Her Majesty's Principal Secretary of State for India in Council, London.

Right Honourable Sir,

Bombay Castle, 27 January 1866.

WE have the honour to forward copies of correspondence, as per margin, on the subject of an offer made by Messrs. Stearns, Hobart & Co., in behalf of the Bombay and Bengal Steamship Company, to carry two additional mails every month between Bombay and Suez for 20,000 rupees a month.

1. Telegram to the Secretary of State, dated the 19th instant.
2. Messrs. Stearns, Hobart & Co.'s tender, dated the 12th *idem*.
3. Letter from the Government of India and its accompaniment, dated the 17th *idem*.
4. Note by the Director General of the Post Office, dated the 26th *idem*.

2. We beg strongly to recommend that this tender be at once accepted provisionally for one year. The amount asked is, in our opinion, very moderate.

3. The rate of speed (eight knots), though low, is sufficiently high to commence with. The steamers are already on the line, and Messrs. Stearns, Hobart & Co. write that "they have in contemplation the building of a class of boats, not only larger and faster, but in every way superior to any now in the East, and capable of delivering the mails within 20 days between England and India; and that plans for placing these vessels on the route are so far matured that, should the tender they have made be accepted, and a reasonable prospect held out of their receiving a fair subsidy through to England, they have little doubt of their being in a position to carry the project into immediate execution."

4. The departure of these steamers from Bombay might be so timed as to ensure their arrival at Suez in time to meet the Galle mails. Should there, however, be any difficulty in this respect, we have reason to believe that Messrs. Palmer & Co., the managers of the Italian Brindisi line, would gladly undertake to run their steamers in connection with the Bombay Company, and thus avoid all chance of a detention of the mails in Egypt.

5. We request the favour of an answer by telegraph.

We have, &c.
(signed) *H. B. E. Frere.*
B. H. Ellis.
C. J. Erskine.

TELEGRAM to the Secretary of State, dated 19th January 1866.

From Bombay - - - To London.
From Governor - - - To Sir Charles Wood.

The following tender for mails between Bombay and Suez, offered by Stearns, Hobart, on behalf of Bombay and Bengal Steamship Company, is forwarded at the request of the Government of India. Fortnightly voyages; speed, eight knots; subsidy, 20,000 rupees per mensem; dates of arrival and departure to be fixed at discretion of Government.

App. No. 15.

Messrs. *Stearns, Hobart & Co.*'s Tender, dated 12th January 1866.To *H. B. Riddell, Esq.*, Director General of Post Offices in India, Calcutta.

Dear Sir,

WE have the honour to bring to your notice that, in May 1865, an application was made by us for the conveyance of a bi-monthly mail between Bombay and Suez, for 60,000 l.

Since making this application we have succeeded in establishing an overland transit for freight between India and Great Britain, and are consequently in a position to greatly reduce the figure at which we can undertake the mail service in question.

We are prepared to run steamers from Bombay to Suez on the following days, namely, 2nd and 18th of each month during the fair season, and from the middle of May to September on the 14th and 29th; or on such as the Department may appoint, by which they would be enabled to overtake the Calcutta mail before it leaves Suez.

Returning boats to leave Suez on the 4th and 19th of each month, or immediately after the arrival of the Calcutta mail from England at Suez.

We will undertake to carry the mails at present at an average rate of, say, eight knots per hour, though we shall expect to attain a much higher speed.

In consideration of the performance of this service, we are to be remunerated at the rate of 10,000 rupees per trip, or 20,000 rupees per month.

We shall doubtless be sending extra steamers from this each month, and may possibly send boats weekly. By these extra boats we will carry, free, whatever mails may offer.

Should this tender be accepted, we shall expect no remuneration for mails carried by our steamers during the year 1865.

It may not be out of place to mention, although not as a part of our tender, that we have in contemplation the building of a class of boats, not only larger and faster, but in every way superior to any now in the East, and capable of delivering the mails within 20 days between England and India; and plans for placing these vessels on the route are so far matured that, should the tender we have made be accepted, and a reasonable prospect held out of our securing a fair subsidy through to England, we have little doubt of our being in a position to carry the project into immediate execution.

We have, &c.

(signed) *Stearns, Hobart & Co.*,
Treasurers and Managers,

Bombay, 12 January 1866.

Bombay and Bengal Steamship Company, Limited.

(No. 629.)

From *E. C. Bayley, Esq.*, Secretary to the Government of India, to *C. Gonme, Esq.*,
Secretary to the Government of Bombay, dated Fort William, 17 January 1866.

Sir,

I AM directed to forward, for the information of his Excellency the Governor in Council, the accompanying copy of a letter this day addressed to the Director General of the Post Office of India, on the subject of an offer made by the Bombay and Bengal Steamship Company to carry two additional mails every month between Bombay and Suez, for 20,000 rupees a month.

2. The Governor General in Council desires me to request that the Governor in Council will be good enough, in communicating with the home authorities on the subject, to add any further information which his Excellency in Council may think it useful to make known to the Secretary of State.

I have, &c.

(signed) *E. C. Bayley*,
Secretary to the Government of India.

(No. 628.)

From *E. C. Bayley, Esq.*, Secretary to the Government of India, to *H. B. Riddell, Esq.*,
Director General of the Post Office of India, dated Fort William, 17 January 1866.

Sir,

I AM directed to acknowledge the receipt of your two telegrams of the 14th and 16th inst., regarding an offer made by the Bombay and Bengal Steamship Company to carry two additional mails every month between Bombay and Suez, for 20,000 rupees a month.

2. The

2. The offer, as you have been informed by telegraph, has been communicated to the Secretary of State for India; and a copy of the message, for facility of reference, is entered in the margin.*

3. I am further directed to subjoin copy of a telegram this day sent to Poonah, to your address; and to request that, in sending, through the Government of Bombay, to the Secretary of State a specific statement of the conditions of the offer, you will be good enough to specify the average speed at which the steamers are to make the trip, the number of days for each trip, and the dates of departure of the vessels from Bombay, length of detention at Aden or other intermediate port, and arrival at Suez, and *vice versa*.

4. It will obviously be necessary that these dates should be arranged so as to fit in with the arrival at, and departure from, Alexandria of the steamers which convey the mails sent by way of Galle.

I have, &c.
(signed) *E. C. Bayley*,
Secretary to the Government of India.

TELEGRAM from Home Secretary, Calcutta, to the Director General of Post Office, Poonah, dated 17 January 1866.

THE offer of the Bombay and Bengal Steamship Company has been telegraphed to England. Send home by telegraph, through the Bombay Government, the conditions of the offer, especially as to speed and the time of departure from and arrival at Suez. More by post. Remain at Poonah or Bombay till you receive the letter.

NOTE by *H. B. Riddell*, Esq., Director General of Post Offices in India, dated 26 January 1866.

IN transmitting Messrs. Stearns, Hobart & Co.'s tender, it would, I think, be well to notice the fact that the steamers with which it is proposed to perform the service are actually on the line, and can be utilized as soon as the English Post Office send a mail for Bombay; and the rest of India, by the Galle steamers on the 11th and 26th, to be carried from Suez to Bombay, by Messrs. Stearns & Hobart's steamers. Letters are now sent from Bombay to England by Messrs. Stearns, Hobart & Co.'s steamers, but it is not possible to extend the benefit of the extra outward mail to India generally, as the dates of departure are not fixed, and there is a chance of the mail steamer from Calcutta arriving before Messrs. Stearns, Hobart & Co.'s freight steamer from Bombay, and in that case the mails would be detained in Egypt.

2. Messrs. Stearns, Hobart & Co., I was informed, are willing to accept a provisional temporary contract. It would clearly not be desirable to accept a tender proposing a speed of only eight knots an hour, except as a temporary make-shift.

3. If Government were to conclude an agreement with Messrs. Stearns, Hobart & Co. for the conveyance of two extra mails in each month to and from Suez and Bombay, I believe that Messrs. Palmer & Co., the managers of the Italian Brindisi line, would gladly undertake to run their steamers from Alexandria to Brindisi, in connection with the Bombay steamers, and so avoid all chance of the mail being detained in Egypt in consequence of the earlier arrival of the China mail.

4. I do not think I have any more to add. I advocate the immediate acceptance of Messrs. Stearns & Hobart's tender.

1. Because it will at once give to India the advantage of two additional mails in each month, and remedy partially the inconvenience of the present arrangements.

2. Although the rate of speed is very slow, the time gained will be considerable, and the rate, probably, in practice not far below that of the present mail steamers.

3. The subsidy asked is, in my opinion, very moderate.

4. If any practical difficulty is anticipated, in regard to the homeward mails, from the possible speed of the Galle steamers causing them to reach Suez before Messrs. Stearns & Hobart's, the inconvenience might be remedied by an arrangement with the managers of the Italian line from Alexandria to Brindisi.

Bombay, 26 January 1866.

H. B. Riddell.

* "Telegram, from the Governor General in Council to the Secretary of State for India, India Office, London; dated Calcutta, 17th January 1866.

"We have received from the Bombay and Bengal Steamship Company a general offer to carry two additional mails every month between Bombay and Suez for 20,000 (twice 10,000) rupees a month. We recommend the acceptance of this offer, under proper conditions, to the favourable consideration of Her Majesty's Postmaster General."

App. No. 15.

(Home Department—Post Office.—No. 15 of 1865.)

To the Right Honourable Sir *Charles Wood*, Bart., G.C.B., Secretary of State for India.

Sir,

Fort William, 23 November 1865.

* No. 2447, dated
0 November 1865.

In continuation of our Despatch in this Department, No. 5, dated the 17th of April last, we have the honour to submit for your consideration a further communication* from the Director General of the Post Office on the subject of the arrangements for postal communication between England and India.

2. We earnestly hope that the existing arrangement, which causes great dissatisfaction to the mercantile and general community, will not be much longer retained, but that it will be superseded by the establishment either of a weekly mail, or of four mails a month to Bombay. The Nagpore extension of the Great Indian Peninsula Railway will be opened to Wurdah, within 60 miles of Nagpore, in January next, and will be completed to Nagpore, it is believed, in January 1867. Between Nagpore and Mirzapore the whole distance can be traversed by mail carts throughout the year. Even now, it will be seen from the dates for closing the mails which are given in Mr. Riddell's letter, the mails *viâ* Galle have become for letters quite useless. The mail which left Calcutta this morning by the Galle route is due in London on or about the 27th proximo, while the mail which closes this evening for the Bombay route, and by which this Despatch will be transmitted, should, it is believed, reach London on or about the 21st.

We have, &c.

(signed) *John Lawrence.*
H. S. Maine.
W. Grey.
H. M. Durand.

POST OFFICE.—25 October 1865.

(No. 26.)

PROCEEDINGS of the Right Honourable the Governor General of India in Council, in the Public Works Department (No. 891 c); dated Simla, 2 September 1865.

Read again—

Public Works Department, Resolution No. 2263 G.G., dated the 21st September 1863,
Ditto - - ditto - Resolution No. 9-13 c, dated the 6th January 1865.

Mail Lines between Bombay and Calcutta, and between Bombay and the North Western Provinces.

Read also—

Letter No. 86, dated the 7th March 1865, from the Under Secretary to the Government of the North Western Provinces, in the Public Works Department, Railway Branch.
Letter No. 158 G, dated the 13th March 1865, from the Agent to the Governor General for Central India.
Letter No. 782, dated the 8th April 1865, from the Secretary to the Government of Bombay, in the Public Works Department.
Letter No. 8839, dated the 27th April 1865, from the Secretary to the Chief Commissioner of the Central Provinces, in the Public Works Department.
Public Works Department Letter No. 505 c, dated the 20th May 1865, to the Chief Commissioner of the Central Provinces.
Telegram dated the 12th June 1865, from the Secretary to the Chief Commissioner of the Central Provinces, in the Public Works Department.
Telegram dated the 17th June 1865, from the Secretary to the Government of Bombay, in the Public Works Department.
Letter No. 1647, dated the 7th July 1865, from the Secretary to the Chief Commissioner of the Central Provinces, in the Public Works Department.
Letter No. 1859, dated the 10th August 1865, from the Secretary to the Government of Bombay, in the Railway Department.

Observations.—In Public Works Department Resolution No. 2263 G.G., dated the 21st September 1863, the Post Office Administration was furnished with information in regard to the state and probable progress of the lines that were then in use, or which might shortly be used, for the conveyance of the mails between Bombay and the North Western Provinces, and between Bombay and Calcutta. In January 1865, it appeared to the Governor General in Council desirable to revise the conclusions arrived at, on the date available when the resolution above quoted was recorded; and the Governments of Bombay and the North Western Provinces, the Chief Commissioner of the Central Provinces, and the Agent to the Governor General for Central India, were requested to consider and report, at an early date, the facts as to the lines of railway and road in their respective territories, to enable this Department to furnish a corrected statement to the Post Office Administration. The letters above read, contain replies to this call.

2. Before

2. Before proceeding to give an abstract of their contents, it may be stated that the mails for Calcutta and the North Western Provinces are now taken by rail from Bombay to Nargaum, a station on the Nagpore branch of the Great Indian Peninsula Railway, about 19 miles from Bhosawul, which is the junction of the branch with the main line; and the time occupied in their transmission to Benares is stated by the Bombay Government to be 100 hours, as shown on the margin.

	Miles.	Hours.
Bombay to Nargaum; rail	- 295	19
Nargaum to Agra; road	- 535	62
Agra to Benares; rail	- 371	19
Total	- 1,201	100

3. The present state and probable progress of the various lines of railway, gathered from the reports now before the Government, and other accessible information, is as follows:—

Great Indian Peninsula Railway, North East Extension.

4. The line is at present open to Bhosawul, but no part of the North East Extension is as yet completed. The Taptee viaduct will, it is reported, be opened in October next; and the following are given as the earliest probable dates of opening the further sections of this line.

To Khundwa	- - - - -	May 1866.
To Hurda	- - - - -	early in 1867.
To Sohagpore	- - - - -	ditto 1868.
To Jubbulpore	- - - - -	ditto 1869.

It appears to the Governor General in Council that no advantage will accrue to the mails from the opening of any sections of the North East Extension beyond Khundwa, until the whole line is available, as by the time that the section up to Hurda is open, the road between Nagpore and Jubbulpore will be in complete order throughout. It may, however, be possible to open the line throughout for trollies, on which the mails may be sent some time before the dates here given, which are those on which it is hoped that the line will be completed up to the various points named. Trollies drawn by horses can attain a speed of 12 miles an hour. It is possible, therefore, that by this means the results arrived at in the subsequent paragraphs of this Resolution may fall short of what will be actually attainable.

Great Indian Peninsula Railway.—Nagpore Branch.

5. This branch is now open as far as Sheagaum,* and the following are given as the probable dates of opening the further sections:—

To Budnaira	- - - - -	November 1865.
Kowteh (Wurdah river)	- - - - -	March 1866.
Nagpore	- - - - -	January 1867.

East Indian Railway.—Jubbulpore Extension.

6. No portion of this line will be available until the whole is completed; and the Government of the North Western Provinces reports that the earliest possible date by which the whole line may be finished is 1st April 1867, which is the date by which the contractors are bound to complete it.

7. It remains to be considered how far these various extensions of railways may, from time to time, be taken advantage of for the purpose of expediting the transmission of the mails to Calcutta and Agra, respectively; the chief points for determination being—

1st. Will it, on 1st November 1865, be advisable to take the Calcutta mails *viâ* Nagpore and Jubbulpore, instead of *viâ* Nargaum, Indore and Agra?

2nd. Will this still be the best route when the line is open to Khundwa, viz., on 1st May 1866?

3rd. Should the Agra mails be transferred to the line *viâ* Khundwa and Indore, instead of Nargaum and Indore, on the opening to Khundwa?

4th. Will it be advisable, on the opening of the Jubbulpore extension of the East Indian Railway in April 1867, to transfer all Agra mails to this route?

8. If the first two questions be answered in the affirmative, the question of the Calcutta mails will be settled; for any subsequent extensions of the railway between the Wurdah River and Mirzapore will increase the advantages of this route until the North East Extension of the Great Indian Peninsula Railway is open, when of course all mails will go by it; but the answer to these depend in great measure, in fact, almost entirely, on the probable state, on 1st November 1865, of the road from Nagpore to Jubbulpore and on to Mirzapore, and on that of the road from Budnaira to Nagpore.

9. The last-named piece of road is about 117 miles in length, and it is probable that the 30 miles nearest to Nagpore will be metalled by the end of the working season in 1865-66. The rest is a mere cart track, but good in dry weather.

10. As

* Distant from Bombay	- - - - -	Miles.
Ditto - Bhosawul	- - - - -	340
Ditto - Nargaum	- - - - -	64
	- - - - -	45

App. No. 15.

10. As regards the road between Nagpore and Jubbulpore, a very full report has recently been received on the portion between Kamptee (ten miles from Nagpore) and Jubbulpore; and from this it appears that, with the exception of the Korai Ghât, there will, on the 1st November next, be no obstacle to mail cart traffic which may not be temporarily overcome, and which will not be entirely removed, by June 1866. The old ghât road can also, it is said, be rendered passable for mail carts, should it be considered desirable to do so.

11. The road from Jubbulpore to Mirzapore is metalled from end to end, and mail carts run on it. The bridging is still incomplete; and, in the near prospect of the completion of the railway, it is not considered worth while to do more at present than to finish those bridges which are in hand.

12. On the whole, it appears to the Governor General in Council that eight miles an hour may safely be calculated on as the minimum speed which will be attainable by mail carts between the Wurdah River and Mirzapore when the Nagpore extension of the Great India Peninsula Railway is open to that river. The whole time occupied in travelling from Bombay to Mirzapore by the two routes, *viâ* Nagpore and Jubbulpore, and *viâ* Nargaum and Indore, will then be as follows, assuming a rate of 18 miles an hour on the line from Bombay in both cases:—

<i>Viâ Nagpore and Jubbulpore on 1st November 1865 :</i>		<i>Miles.</i>	<i>Hours.</i>
Bombay to Budnaira; rail	- - - - -	410	23
Budnaira to Nagpore; road, at six miles an hour	- - - - -	107	18
Nagpore to Mirzapore; road, at eight miles an hour	- - - - -	407	51
TOTAL		924	92
<i>Viâ Nagpore and Jubbulpore on 1st March 1866 :</i>			
Bombay to Wurdah River; rail	- - - - -	457	25½
Wurdah to Nagpore; road	- - - - -	60	7½
Nagpore to Jubbulpore; road	- - - - -	162	20
Jubbulpore to Mirzapore; road	- - - - -	245	31
TOTAL		924	84
<i>Viâ Nargaum and Indore :</i>			
Bombay to Nargaum; rail	- - - - -	295	16½*
Nargaum to Agra; road	- - - - -	535	62 †
Agra to Mirzapore; rail	- - - - -	332	17 ‡
TOTAL		1,201	95½

showing a balance of about 3½ hours on 1st November 1865, and 11½ hours on 1st March 1866, in favour of the Nagpore route.

13. Again, on the opening of the North East Extension of the Great India Peninsula Railway to Khundwa, the time to Agra will be as follows:—

	<i>Miles.</i>	<i>Hours.</i>
Bombay to Khundwa; rail	352	20
Khundwa to Agra; road	450	53§
TOTAL	802	73

which shows a saving of about eight hours on the present line *viâ* Nargaum, besides a diminution in length of mail cart work of 85 miles. The answer to the third question is therefore clear, viz., that the Agra mails should go by Khundwa as soon as possible.

14. In

* Calculated at 18 miles an hour. The present time is stated by the Bombay Government to be 19 hours.

† Present time, as given by Bombay Government.

‡ Advertised time.

§ Calculated at present rate from Nargaum to Agra.

14. In comparing the route *viâ* Khundwa and Agra to that *viâ* Nagpore, for the Calcutta mails, the following result is arrived at *viâ* Khundwa :—

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	Miles.	Hours.
Bombay to Agra, as above - - - - -	802	73
Agra to Mirzapore - - - - -	332	17
TOTAL - - -	1,134	90

which is about six hours longer than the other route. The second question raised is, therefore, easily disposed of, viz., that the Calcutta mails should go by the Nagpore route when the Nagpore branch of the Great India Peninsula Railway is not open beyond the Wurdah, although the North East Extension be open to Khundwa.

15. The next point to be determined is whether, after the Jubbulpore extension of the East Indian Railway is open, it will be worth while to send the mails for Agra by that route.

16. The following would be the calculation :—

<i>Viâ Nagpore :</i>	Miles.	Hours.
Bombay to Nagpore; rail - - - - -	517	28½
Nagpore to Jubbulpore; road - - - - -	162	20
Jubbulpore to Allahabad; rail - - - - -	225	12½
Allahabad to Agra; rail - - - - -	275½	13½
TOTAL - - -	1,179½	74½

against 73 hours *viâ* Khundwa.

17. The difference in time on the above calculations would be against the Nagpore route; but there would be greater certainty and regularity owing to the length of road being reduced to 157 miles, which would then all be in good order, and a speed of 10 miles an hour probably obtainable; moreover, the establishment will be on the one road, and have been withdrawn from the other. For every station below Agra, the Governor General in Council is of opinion, the Nagpore route would then undoubtedly be the best.

18. No account has been taken in the above calculations of any possible improvements in the Khundwa, Indore and Agra Road,—1st, because it does not appear probable that any improvement will be made, within the periods referred to, which will materially affect the average rate of travelling; and 2nd, because the results arrived at, would not, except in the last instance, be disturbed by any slight increase in that rate.

19. The results, therefore, arrived at are as follows, with reference only to the probable state of the various lines of railway and road on the several dates named, and the probable rate at which the mails could be carried :—

On 1st November 1865, and after 1st March 1866, or on opening of the Nagpore Branch of the Great India Peninsula Railway to Budnaira—

The Agra mails should continue to go by their present route.

Time to Agra, 79 to 81 hours.

The Calcutta mails should go by rail to the Wurdah River, and thence by road to Mirzapore.

Time to Mirzapore, 93, reducing on 1st March to 84 hours.

1st May 1866, or on opening of the North East Extension of the Great India Peninsula Railway to Khundwa—

The Agra mails should be sent *viâ* Khundwa and Indore, instead of *viâ* Nargaum and Indore.

Time to Agra, 73 hours.

The Calcutta mails should continue to go *viâ* Nagpore.

1st January 1867, or on opening of the Nagpore Branch of the Great India Peninsula Railway to Nagpore—

The Calcutta mails will go as far as Nagpore by rail, saving 60 miles of road and getting an equal amount of rail, thus saving four hours.

Time to Mirzapore, 74 hours.

On 1st April 1867, or on opening of the Jubbulpore Extension of the East Indian Railway from Allahabad to Jubbulpore—

The Calcutta mails will continue to go by the same route; but, instead of 245 miles by road from Jubbulpore to Mirzapore, they will have 225 miles of rail to Allahabad, and 53 more to Mirzapore, which will cause a saving in time of 15½ hours.

Time to Mirzapore, 64½ hours.

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If the Agra mails were also then sent by this route, a loss of time of about two hours would occur for mails to Agra and places above it, ordinarily; but the mails would be more regular, and some 500 miles of mail cart road might be abandoned, arrangements for the additional weight being made on 160 miles.

Arrangements on a small scale would, however, in this case have to be made for towns on or near the old line of road.

ORDER.—Ordered, that a copy of the foregoing resolution be forwarded to the Home Department for information, in continuation of Public Works Department, Resolution No. 13c, dated the 6th January 1865.

(signed) *C. H. Dickens*, Lieut. Col., R.A.,
Secretary to the Government of India,
Public Works Department.

No. 2152, dated Simla, the 20th September 1865.*

COPY forwarded to the Director General of the Post Office of India, with a request that he will submit a report on the subject.

By Order,
(signed) *A. M. Monteath*,
Under Secretary to the Government of India.

(No. 27).

PROCEEDINGS of the Right Honourable the Governor General of India in Council, Public Works Department (No. 1055 c.); dated Simla, 16 October 1865.

Mail lines between Bombay and Calcutta, and between Bombay and the North Western Provinces.

READ again Public Works Department Resolution to Home Department, No. 891 c, dated 2nd September 1865.

Public Works Department Letter No. 892 c., dated 2nd September, to the Government of Bombay.

Read letter from the Government of Bombay, No. 2228, dated 2nd October 1865.

ORDER.—Ordered, that a copy of the above letter from the Government of Bombay be forwarded to the Home Department, with reference to paragraph 4 of the Resolution of 2nd September last, in order that the postal authorities might, if considered advisable, enter into arrangements with the contractors for the North Eastern Extension of the Great India Peninsula Railway for the more extended use of the line on the Nagpore Branch, which, it is now said, may be open to the Wurdah River in January next, instead of March, as before stated.

(signed) *C. H. Dickens*, Lieut.-Col., R. A.
Secretary to the Government of India,
Public Works Department.

(No. 28).

From Colonel *W. Kendall*, R.E., Acting Secretary to the Government of Bombay, Railway Department, to Lieutenant Colonel *C. H. Dickens*, R.A., Secretary to the Government of India, Public Works Department (No. 2288); dated 2 October 1865.

I AM directed by his Excellency the Governor in Council to acknowledge the receipt of your letter, No. 892 c., dated 2nd instant, relative to the use of trollies for the conveyance of the mails on the North Eastern Extension of the Great India Peninsula Railway before it is opened for traffic; and in reply beg to forward copies of communications from the agent of the railway, and the consulting engineer to Government, suggesting that the postal authorities make their own arrangements with the contractors for the line.

From Captain *S. Osborn*, R.N., Agent to the Great India Peninsula Railway, Bombay, to Lieutenant Colonel *A. De Lisle*, R.E., Consulting Engineer for Railways, Bombay (No. 4790); dated 21 September 1865.

IN reply to your letter of the 16th instant, No. 2946, I have the honour to state, that the chief resident engineer is of opinion that the proposed arrangement to make the unopened North Eastern Extension available for the conveyance of mails by trollies, will cause great inconvenience to the contractors, and might end in many difficulties.

I would suggest that the postal authorities make their own arrangements with the contractors where they wish to have trollies. The company can incur no responsibility on unopened contracts.

MEMORANDUM by the Consulting Engineer for Railways, Bombay (No. 3076); dated 25 September 1865.

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THE undersigned has the honour to state that the agent, Great India Peninsula Railway, is unwilling to enter into any agreements with the contractors for conveying the mails by trollies, but suggests that the Postmaster General should make his own arrangements with them.

2. There is, however, no prospect of the mails being carried by the North Eastern Line to Jubbulpore, as what permanent way is laid is in detached portions, and the girder-bridges cannot be completed until the permanent way reaches them; the girders are too heavy for carting.

3. The only way is to go by the Nagpore Branch, which may open to Budnaira in November and the Wurdah River in January. The mails might go beyond this by contractor's train. Within 30 miles of Nagpore there is a good mail road passable in the rains, and a bridged and metalled road to Jubbulpore, so that next rains there would be no difficulty in getting the mails through by this route.

(signed) *A. De Lisle*,
Lieut.-Col., R.E.

No. 3287, dated Simla, 25 October 1865.

COPY forwarded to the Director General of the Post Office of India, in continuation of No. 2152, dated the 20th ultimo.

By Order,
(signed) *A. P. Howell*,
Under Secretary to the Government of India.

(No. 2447.)

From *H. B. Riddell*, Esquire, Director General of the Post Office of India, to *E. C. Bayley*, Esquire, Secretary to the Government of India, Home Department; dated Calcutta, 20 November 1865.

Sir,

WITH reference to the correspondence quoted in margin, I think it right to draw the attention of Government to the fact that, if official reports are to be trusted, the Nagpore extension of the Great Indian Peninsula Railway will very shortly be open to the Wurdah. The time required for the transmission of a mail from Calcutta to Bombay will then be further reduced, and the extravagant absurdity of the existing mail service between India and Suez will be even more glaringly apparent than it now is.

From Director General of the Post Office of India, to the Secretary to the Government of India, Home Department, No. 3247, dated 20th February 1865.
To ditto, from ditto, No. 3287, dated 25th October 1865.

2. The following Memorandum shows the dates on which mails *viâ* Bombay and *viâ* Galle will be despatched during the next six months:—

Date of Mail closed at Calcutta.	Route.	Due in London <i>viâ</i> Marseilles.	Date of Mail closed at Calcutta.	Route.	Due in London <i>viâ</i> Marseilles.
8 Dec. 1865	<i>Viâ</i> Galle -	12 January.	8 March - 1866	<i>Viâ</i> Galle -	12 April.
7 " " "	" Bombay	5 "	8 " " "	" Bombay	5 "
22 " " "	" Galle -	26 "	22 " " "	" Galle -	26 "
24 " " "	" Bombay	20 "	23 " " "	" Bombay	20 "
8 January 1866	" Galle -	12 February.	8 April - 1866	" Galle -	13 May.
7 " " "	" Bombay	5 "	8 " " "	" Bombay	6 "
22 " " "	" Galle -	26 "	22 " " "	" Galle -	27 "
22 " " "	" Bombay	20 "	23 " " "	" Bombay	21 "
8 February 1866	" Galle -	15 March.	8 May - 1866	" Galle -	12 June.
8 " " "	" Bombay	8 "	8 " " "	" Bombay	5 "
22 " " "	" Galle -	29 "	22 " " "	" Galle -	26 "
23 " " "	" Bombay	23 "	23 " " "	" Bombay	19 "

It will be seen that from February the letters despatched by direct steamer *viâ* Galle will reach England a week after those despatched on the same day *viâ* Bombay.

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3. Whatever sum is expended out of the revenues of India for the maintenance of a line of steamers between Suez and Calcutta *via* Galle is, for all postal purposes, absolutely wasted, and I respectfully submit that the interests of India ought not to be sacrificed to the requirement of China and Australia. If the sum paid for the postal communication with China and Australia is not sufficient, it may be necessary to increase the subsidy; but I cannot conceive any reason why the increase should be at the cost of India, or why a sum, which would be probably more than sufficient to provide a weekly mail communication between all parts of India and Suez should be spent on a line which is practically useless to India.

I have, &c.
(signed) *H. B. Riddell*,
Director General of the Post Office of India.

Appendix, No. 16.

PAPER handed in by Mr. Bourdillon.

App. No. 16.

LETTER from Mr. J. D. Dickinson to Sir T. N. Redington, K.C.B.

East India House,
7 Sept. 1854.

Sir,

REFERRING to the 4th paragraph of Sir Melvill's letter of the 3d ult., I am now handed to state, that the Court of Directors of the East India Company have had under consideration the letter from the Secretary to Her Majesty's Treasury, under date the 11th July 1854, ordered by desire of the Board of Commissioners of the Affairs of India, with your letter of the 17th ult. month, as to the proportions of the cost of contract packet service, and of the other expenses of the postal communication with India, with places to the eastward, to be borne by the revenues of the United Kingdom and of India respectively.

It appears from Mr. Wilson's letter, that the arrangements which have been made for the postal service from England to Alexandria, through Egypt to Aden, to all the Presidencies of India, to Ceylon and China, as well as to Australia, and *vice versa*, involve a total cost of 600*l.* per annum, which consists of the following items, viz. :

1st. The contract with the Peninsular and Oriental Steam Navigation Company for the conveyance of the mails between England and the East, including the service to Australia, but exclusive of Bombay, 199,600*l.* per annum;

2d. The contract with the same Company for conveying the mails between Aden and Bombay, 24,700*l.* per annum; and,

3d. The cost of transit of the mails through Egypt, which is 8,000*l.* per annum, paid to His Highness the Pasha.

the Lords of Her Majesty's Treasury propose that in future all the costs included in the above-named sum of 232,300*l.* should be defrayed by the British Government; that the Post Office should receive all the postage, charging to the East India Company, and receiving into the revenue the postage upon the Indian correspondence; and that any loss incurred on these services

should be borne in equal moieties by the Home Government and the East India Company, the latter paying to the former the half of the net loss.

3. Such the Court understand to be the arrangement proposed by their Lordships in substitution for that now in existence; and as the Court have already undertaken to contribute towards the newly made and more extended postal contracts, it only remains to determine what shall be the proportion of their contribution.

4. The Court are unable to admit the validity of the reasoning upon which the Lords of the Treasury appear to base their opinion, that the interests of this country and of India are equal as respects some portions of these contracts. With regard to China, it appears to the Court that the proportionate amount of commercial and political interests possessed by Great Britain and India in relation to that country, was determined upon sound principles when the arrangement was made in the year 1884, for defraying the expenses of the consular establishment maintained by Her Majesty's Government in China, and under which arrangement it was agreed that India should bear one-third of the annual charge of such consular establishment.

5. Whilst the Court are far from underrating the importance to India of the trade with China, they cannot refrain from adverting to the facts that the Indian trade with China is now carried on principally by British shipping, and that, by the commercial and fiscal policy of England, the manufactures of India, which had been superseded in India itself by those of the United Kingdom, have been in like manner driven out of China. The Court think that, upon reconsideration and a reference to these points, the Lords of Her Majesty's Treasury will admit that the value of steam communication with China is far greater to the people of Great Britain than it is to the people of India. The Court must also observe that the postal communication between this country and Alexandria, which has hitherto been conducted at the sole expense of the Crown, must be kept up for purposes irrespective of the

App. No. 16. Government of India, and that, so far as respects Australia, the interest of India in the postal service is of comparatively small importance; they would therefore request that the subject may undergo the review of their Lordships, with the hope, in which they trust that the Board will concur, that the present question may be settled upon the principle that one-third only of the loss sustained by the conduct of the postal communication should be borne by the revenues of India.

6. Whilst discussing this question, the Court would desire to bring prominently to notice the state of the postal service between the principal Presidencies and ports of India and China, and which, from its circuitous route, necessarily involves delay in the interchange of correspondence,

and affords ground of complaint on the part of those who are interested in such communication. The Court are of opinion that at least Calcutta should have the benefit of direct fortnightly communication with Canton by steamships of sufficient power instead of being compelled, as in the case at present with both Calcutta and Madras, to forward its correspondence to Port de Galle, where it is taken up by vessels *en route* to China, and they would suggest that the vessels performing such service should touch at Rangoon and Moulmein on their way to and from China.

I am, &c.
(signed) *J. D. Dickinson*,
Deputy Secretary.

Sir T. N. Redington, K.C.B.

Appendix, No. 17.

PAPERS handed in by Mr. *Dorning*, 15 May 1866.

RAILWAY COMPANIES' ELECTRIC TELEGRAPHS IN INDIA. TABULAR STATEMENT taken from Papers Nos. 3 and 3a, handed into the Select Committee on East India Communications, 1866.

RAILWAYS.	Expenditure on Construction in India to 31 Dec. 1864, including unaudited Balances.	Expenditure in England to 31 Dec. 1864, viz., on Stores, for Freights, &c.	TOTAL Expenditure.	Cash Receipts on account of Private Messages (Service Messages not charged).		Expenditure of the Telegraph Department in India on account of Working and Maintenance.		Number of Miles of Telegraph Lines and Stations open.			
				1863.		1864.		No. of Miles.		No. of Offices.	
				£.	s. d.	£.	s. d.	1863.	1864.	1863.	1864.
India - -	157,791 1 6	70,255 17 -	228,046 18 6	3,996 5 10	4,347 11 -	21,517 11 7	24,712 6 8	1,078	1,105	99	111
Calcutta, Baroda, and Central India - -	6,230 10 3	10,591 3 6	16,821 13 9	No Return.	2,930 - -	726 14 11	3,622 3 10	185½	306	-	37
Madras and South India - -	1,046 18 9	2,547 1 5	3,594 - 2	23 3 8	43 17 4	187 17 9	225 - 10	28	28	9	9
Bengal - -	2,069 7 8	6,430 1 4	8,499 9 -	236 8 -	367 18 9	934 11 11	1,091 19 7	110	110	21	21
Southern of India - -	2,643 6 -	2,330 2 4	4,973 8 4	247 - 9	251 15 -	97 3 7	94 9 3	79	79	13	14
Assam - -	14,207 3 6	34,016 13 8	48,223 17 2	859 7 5	981 1 5	1,235 8 11	2,156 8 -	532	570	55	57
Andaman Islands - -	10,843 4 10	6,202 7 10	17,045 12 8	54 18 2	337 10 4	914 6 7	1,687 13 -	114	114	-	-
Arabian Sea - -	5,696 19 4	12,274 19 10	17,971 19 2	30 - 5	469 1 7	658 11 -	807 13 10	32	47	-	-
Indian Peninsula - -	18,404 17 -	48,342 16 11	66,747 13 11	2,903 13 10	3,760 10 10	5,431 3 1	7,491 3 5	781½	782	57	64
	218,933 8 10	192,991 3 10	411,924 12 8	8,350 18 1	13,489 6 3	31,703 9 4	41,888 18 5	2,940	3,141	-	-

The construction Expenditure of this Company, which is only given in total in their return, has been apportioned between India and England in the ratio (as regards the two countries) of the total Expenditure of all the other Companies.

STATEMENT OF THE CAPITAL EXPENDITURE, and of the WORKING of INDIAN TELEGRAPHS (Government and Railway), taken from a Paper handed herewith to the Select Committee on East Indian Communications, 1866, and Papers referred to therein.

CAPITAL EXPENDITURE:

	£.	s.	d.
Government Telegraphs, to official year 1863-4	-	-	-
Railway Telegraphs, to 31 December 1864	-	-	-
TOTAL	£.1,558,786	6	11

	Government Telegraphs, Official Year 1863-4.	Railway Telegraphs, Year ending 31 Dec. 1864.	TOTAL.
WORKING:	£. s. d.	£. s. d.	£. s. d.
EXPENDITURE (working and maintenance)	136,556 1 8	41,888 18 5	178,445 - 1
RECEIPTS (for telegraph messages, &c.)	91,363 - 10	13,489 6 3	104,852 7 1
Balance of loss, irrespective of interest on capital	45,193 - 10	28,399 12 2	73,592 13 -

Note.—The Receipts in respect of the Railway Telegraphs are for private messages only, Service messages not being charged for.

SUMMARY of STATEMENTS of RECEIPTS and EXPENDITURE on account of GOVERNMENT ELECTRIC TELEGRAPHS in *India* from the year 1850-51 to 1863-64, both inclusive; taken from Parliamentary Paper No. 287 of 1863 and No. 20 of 1866.

Expenditure incurred in Construction.			Statement showing the Cash Receipts on account of Private Messages, Fines, and amount of Credits on account of Service Messages.				Expenditure of Government Telegraph Department, India, on Account of Working and Maintenance.
In India after Credit for Receipts of Unserviceable Stores.	In England, viz., on Purchase of Stores, Freights, &c.	TOTAL.	Cash Receipts on Account of Private Messages.	Charges on Service Messages.	Receipts by Fines.	TOTAL.	
£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
561,840 1 6	585,021 12 9	1,146,861 14 3	378,714 11 8	125,864 9 5	3,576 11 6	508,155 12 7	933,463 12 0
In this statement the entire expenditure in England on account of electric telegraphs in India (as it is given in the Government Return) has been included under the head of Construction Expenditure; but it is probable that a portion of this expenditure may have been in respect of working and maintenance.							

SUMMARY of STATEMENTS of RECEIPTS and EXPENDITURE on account of RAILWAY COMPANIES' ELECTRIC TELEGRAPHS in *India*; taken from Papers Nos. 3 and 3a delivered into Select Committee on East Indian Communications, 1866.

Expenditure incurred in Construction to 31st December 1864.			Receipts on account of Telegraph Messages during the year 1864.			Expenditure of the Telegraph Departments in India, on account of Working and Maintenance during the year 1864.
In India.	In England.	TOTAL.	Private Messages.	Service Messages.	TOTAL.	
£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
218,933 8 10	192,991 3 10	411,924 12 8	13,489 6 3	Not charged -	13,489 6 3	41,888 18 0

Appendix, No. 18.

LETTER addressed to the Chairman.

From the Honourable *A. F. Brown*, Chairman, Chamber of Commerce, to *R. W. Crawford*,
Esq., M. P., London.

App. No. 18.

Chamber of Commerce, Madras,
5 April 1866.

Sir,

I AM desired by the Chamber of Commerce to express the satisfaction with which the intelligence of the appointment of a Committee of the House of Commons to inquire into the working of the Indo-European line of telegraph, has been received; and to acknowledge the obligation under which you have laid the commercial community of this country, by your exertions in this important matter.

It occurs to the Chamber to address you again with reference to arrangements which have been suggested for improving the efficiency of the service, and obviating the irregularities and delays which have hitherto been productive of much inconvenience to the public.

Under the present system nothing is known with certainty as to the route by which messages are forwarded through the Continent, and it constantly happens that messages are outstripped by those of later dates, owing to the employment of different lines. It is therefore most desirable that one, or rather two lines, under the control of the British Government, should be reserved exclusively for Indian telegrams in passing through Europe; and arrangements with this object will be hailed with much satisfaction throughout India. The Chamber also desire to ask your aid in obtaining the assent of Government to the necessary measures for completing, without delay, an alternative land line between Fao and Kurrachee, to serve, in case of accident to the cable, which is at present the only means of communication between these places.

Great inconvenience has been already occasioned by the cable having given way during the south-west monsoon, and its exposed situation renders a recurrence of the accident so probable, that the Chamber would urgently call attention to the necessity of a land line as proposed, so as to prevent the serious consequences which an interruption of the service, by the giving way of the cable, is certain to produce. It is understood that there are no difficulties in the construction of this line, which cannot be easily overcome, and the Chamber trusts that in a short time the risks of interruption will be altogether put aside.

The Chamber trust that the importance of the measure proposed will be considered as sufficiently justifying their again troubling you.

I have, &c.

(signed) *A. F. Brown*, Chairman.

Appendix, No. 20.

PAPERS handed in by Mr. Thornton, 15 May 1866.

Appendix, No. 20.

REPORT by Major Champain on the recent Working of the Turkish Portion of the TELEGRAPH.

(No. 279.)

Sir,

Constantinople, 12 April 1866.

Preliminary remarks.

IN my letter, No. 271, of the 26th February, I reported my arrival in Constantinople. Since that time I have been occupied in obtaining information as regards the working of the Turkish portion of the Indo-European Telegraph, and I have now the honour to submit the following remarks for the consideration of the Right Honourable the Secretary of State in Council.

II. On the 16th December last, Mr. Hammond addressed the India Office, and, while enclosing a letter from Lord Lyons relating to the unsatisfactory state of affairs in Turkey, he stated that Lord Clarendon was of opinion that some Englishman of experience in these matters should proceed to Constantinople, in order to assist Her Majesty's Minister in pointing out the causes of failure.

As I was the only officer available at the time for this purpose, I was accordingly directed to report myself to Lord Lyons, and I believe that copies of my letters, No. 227, of the 6th December, and No. 242, of the 29th December, addressed to your predecessor, were enclosed to his Lordship.

III. Business connected with the Indian Telegraph Department, and with the fresh supply of cable for the Persian Gulf, detained me some weeks in England, so that I did not reach Constantinople before the 23rd February, and then, as briefly reported by me to you, I found the line working so well that I considered it by no means a favourable opportunity to hint at such proposals as those contained in my previous reports.

IV. Since my arrival I have had several interviews with Agathon Effendi, the Director General of Turkish telegraphs, and on information derived from him, from Mr. Courtenay, and from other sources, I have based the following statement.

It will be necessary for me to commence my report by a short sketch of the Turkish lines of telegraph which form a part of the long Indo-European chain, and, to avoid confusion, I will not here refer to the less important lines extending from the various towns of Europe to Constantinople, but solely to those from London itself.

V. The first and most important is that from London *viâ* the Hague, Berlin, Vienna, Belgrade, and Nissa. During the month of January 1866, 54 per cent. of the messages from India to London, and 64 per cent. of those from London to India, took that route. Lately it has been working remarkably well, and another wire, solely for our use, is now being attached. From Nissa to Constantinople is about 450 miles.

Description of different routes from London to Constantinople.

VI. Second in importance is the route from London *viâ* Paris, Turin, Otranto, Valona, and Salonica; but until quite lately the working has been unsatisfactory. In fact, during January only two per cent. of the homeward and 29 per cent. of the outward messages were sent by Valona. During the last few weeks it has nevertheless vastly improved; and I have been urging on the Turkish Director General, Agathon Effendi, the necessity of improving the portion between Salonica and Constantinople, which has given much cause of complaint. Valona itself is remarkably unhealthy, and the country between it and Constantinople is subject to floods, which occasionally interrupt communication. The advantages, however, of avoiding frequent retransmission, such as occur on a line passing through many States, cannot be overlooked. From Valona to Constantinople is about 700 miles.

VII. Thirdly comes the line through the Hague, Berlin, Vienna, Bucharest, Roustchouk, and Varna. During January no less than 44 per cent. of the homeward, but only three per cent. of the outward, went this way.

0.43.

4 M

VIII. Fourthly

App. No. 20.

VIII. Fourthly comes the line *viâ* Trieste and Castellastua to Salonica; and, fifthly, that *viâ* Toulitcha, near the mouth of the Danube; but these last are rarely used, except for local communication.

Real Indo-European line.

IX. At Constantinople, or rather Pera, where all these feeders converge, commences the real Indo-European line. The line crosses the Bosphorus, by a submarine cable, some six miles to the north of the city. Reaching the Asiatic side, it passes to Scutari and Ismid, and thence in a tolerably direct line through Angora, Sivas, Diarbekir, Mosul, and Bagdad, to Faô, where it meets the Persian Gulf cable. The entire distance traversed between Constantinople and Faô being 1,750 miles.

X. Between Bagdad and Faô the state of the country is, in a political point of view, so unsettled, that a duplicate line has been constructed through Persia, connecting Bagdad with Teheran and Bushire; but on this subject I need not enlarge in the present letter.

XI. The line from Constantinople to Bagdad was finished some years ago, but south of Bagdad the difficulties encountered by the Turkish officials were so great that the completion of the line connecting Bagdad with the sea was postponed, until absolutely called for by the successful submersion of the Gulf cable.

Date of opening Indo-European line.

XII. In April 1864, the operations in the Persian Gulf were concluded under Colonel Stewart, while the land lines from Bagdad were being pushed on as rapidly as possible by Mr. Greener and others, under Colonel Kemball's personal direction. Not until the 2nd of February 1865, however, was the line finished, nor (owing to interruptions in the desert) did working fairly commence before the 22nd.

XIII. With regard to the statistics which follow, I show only the results of the working of the telegraph between Constantinople and Kurrachee, and not of that of the European and Indian lines. The latter can scarcely be considered part of the Indo-European line proper, although they are so intimately connected therewith that I shall be compelled to allude to them in some measure before I conclude.

Reference to statistics at the end.

XIV. Appendix A., at the end of this report, shows the number of messages which passed to and from India and England during the several months of the first year's working, and Appendix B. shows the times occupied in transmission.

XV. With reference to the latter, it is impossible to avoid being struck by the unsatisfactory returns for October, November, and December; but very remarkable improvement was shown immediately afterwards, and I think it may be desirable for me to explain these sudden changes.

Reason of sudden changes in the rate of working.

XVI. In Article VI. of the Indo-Ottoman Telegraph Convention, it was stipulated that two separate offices should be kept up at Pera, one for the European and the other exclusively for the Asiatic or Indo-European line.

XVII. These offices had each their superintendent, Mr. O'Connor for the former, and Mr. Pericles for the latter, and in practice the arrangement was not found to work well. Delays occurred in passing despatches from one to the other, and numerous misunderstandings of various kinds occurred. When, therefore, Mr. Pericles was removed by promotion, on the 15th of October, it was decided to try the effect of temporarily amalgamating the two offices. This has eventually proved very satisfactory; but the sudden loss of Mr. Pericles threw matters for a time into disorder. Unfortunately at the same period the Bosphorus cable failed, and messages had to be sent by hand from Pera to Scutari on the Asiatic side, involving a delay of from 12 to 16 hours. To add to the complications, only one wire on the Asiatic local line remained in working order, and the Turkish Government (in violation of the terms of the treaty) constantly employed our special wire for its own purposes. An insurrection at the Circassian settlement, near Erzeroum, increased the causes for interference with our wire, and in addition to all this, at no period since the opening of the line have so many "accidental" interruptions taken place as at the time to which I allude, particularly on the section between Diarbekir and Mosul.

Improvements during February 1866.

XVIII. The improvement displayed by the results of the working during January and February is very marked, and although the returns for the two months have not yet been forwarded to me, I beg to draw your attention to the following statement received from Mr. Brasher at Kurrachee, giving the times occupied in transmitting messages between the 1st and the 12th of February from the United Kingdom to India. Of 405 messages sent, the slowest occupied six days, the quickest passed from end to end in 2½ hours, and the mean time was 1 day 19 hours and 40 minutes.

Causes of improvement.

XIX. The causes of the increased rapidity are, I believe, as follows,—First, the amalgamation of the two Pera offices under one responsible head. Secondly, Lord Lyons' urgent and repeated remonstrances with the Ottoman Government, which led to the substitution of European inspectors in the place of two inefficient Turkish officers, to stringent orders being issued to all the offices to give every facility for rapid transmission, to various threats of dismissal held out to careless subordinates, to the punishment of several clerks for negligence and insubordination, and to the execution of some of the most requisite repairs.

XX. Good

XX. Good as appear the returns for February 1866 compared with those of the previous months, yet there seems to me ample room for increased efficiency; $2\frac{1}{2}$ hours is a far higher rate than we can reasonably anticipate, and the average of 1 day, 19 hours, and 40 minutes, is decidedly good, but the recipient of the one despatch which occupied six days has, I think, fair ground of complaint, and, if we could but arrive at a more uniform rate for all "through" messages, even without raising the average, we ought to be more satisfied. A grand step towards attaining this uniformity would be the constant signalling from Constantinople to Faô, without repetition at the intermediate stations. We have repeatedly communicated direct from Constantinople to Kurrachee, and many messages passed lately from Faô to Adrianople, yet the following table shows that full advantage is rarely taken of the capabilities of the wire. Out of the messages despatched for India from Constantinople during January 1866, only

2	per cent.	went direct to	Faô.
3	"	"	Bagdad.
$\frac{1}{2}$	"	"	Mosul.
53	"	"	Diarbekir.
36	"	"	Sivas.
$5\frac{1}{2}$	"	"	Angora.

During February, however, 5 per cent. went direct to and from Faô, 32 and 28 to and from Bagdad, a manifest advance; and March and April (so far) give still better results.

I think that (at least in fair weather) the repetition of messages between Constantinople and Faô should be the exception, and not the rule, and if the hearty co-operation of the various heads of offices were secured, and the bad material now on the line gradually replaced by the best that can be obtained, one great cause of delay and inaccuracy would be removed. I should add that, during April 1866, the line was worked frequently direct from Valona to Bagdad, over 2,000 miles.

XXII. Considering the nature of the country, I think the system of line guards in Turkey is good, but the number of inspectors is too small. In Europe, there is one of the latter at Gallipoli, one at Salonica, one at Bourgas, one at Monastir, one at Nissa, and one at Roustchouk. Line Guards and Inspectors.

In Asia, there are five,—

1	between	Constantinople and Angora.
1	"	Angora and Diarbekir.
1	"	Diarbekir and Mosul.
1	"	Mosul and Bagdad.
1	"	Bagdad and Faô.

The last five are all Europeans, excepting the one between Diarbekir and Mosul, who is a Turk, and it may be observed that his section is the worst managed on the line.

XXIII. On the 23rd of November, his Highness Ali Pacha promised Lord Lyons that the strength of this portion of the staff in Asia should be increased by the addition of two sub-inspectors to each inspector, but it seems that this arrangement has not hitherto been carried out. The duty of each inspector is to survey his portion of the line twice every year, and in the event of interruption to make special tours. The whole line is inspected daily according to fixed rules by the chaoushes (line guards) and the head chaoushes * who report to the inspector of their respective sections.

XXIV. Most of the clerks employed for the international service are French, Italians, and Greeks, and their knowledge of the English is slight. At present there are only five English clerks on the line, whose duty it is to correct errors which may arise in the through messages. One of these is at Salonica, one at Sivas, two at Diarbekir, and one at Bagdad. Mr. Millingen, the present head of the Pera office, acts as corrector for that station. In my opinion, it would be advisable to increase the number of Englishmen, although if frequent repetition of messages could be avoided, they might be concentrated at fewer points. For thorough efficiency there should be, I think, two at Nissa, two at Salonica, three or four at Pera, two at Diarbekir, and two at Bagdad. Our own cable clerks sufficing for the work of correction at Faô. Clerks.
Office arrange-
ments.

XXV. A great quantity of the material of the Turkish land lines is of a cheap and bad description. The wire, which was furnished to the Turkish Government by English manufacturers of some renown, appears to be generally exceedingly rough, brittle, and liable to split longitudinally. The insulators are partly of iron (Siemens' pattern) and partly of porcelain (a French pattern), but Agathon Effendi, the Director General, has decided on substituting iron for porcelain in every case. The posts are in some places unfit for the work, but better are gradually being supplied, and it is to be hoped that by degrees the line may become trustworthy as regards the material of which it consists. Material.

XXVI. The

* There are 21 Head Chaoushes and 202 Chaoushes between Pera and Faô.

App. No. 20.

Future prospects
of Turkish Line.Injudicious
economy of the
Turkish Author-
ities.Imperfection in
management out of
of Turkey.Mistakes made in
sending *viâ* Russia
and Persia.Russian Route
cheaper.Time *viâ* Russia
and Persia during
February 1866.Attempt to send
messages to the
Persian Gulf by
the Malta and
Alexandria cable.Best means to
prevent diversion
of Messages.Present system of
Accounts.

XXVI. The increased rapidity and certainty of the Turkish telegraphic line has lasted now uninterruptedly for more than three months, a fact which surprises me greatly, but I confess that I am not sanguine as to the security of the system, nor as to its future results. Great external pressure has been brought to bear, and corresponding exertions have been almost forced from the Turkish authorities. The present Director General, Agathon Effendi, is undoubtedly a man of great ability, and is anxious to carry out our views, but I do not think that the Turkish Government is sufficiently alive to the importance of the undertaking, at least in English eyes, and injudicious economy prevents anything like perfection being arrived at. A very large proportion of the clerks employed are not paid at all, but are induced to remain in the service by promises of permanent employment at some future time. The relative number of paid is so small compared to that of unpaid signallers, that it is scarcely possible for these promises to be carried out, unless some great increase in the staff be authorised, and numbers of these expectants are finally compelled to desert the offices where their services are really valuable. I have already brought this fact in plain terms before Agathon Effendi's notice, and it is clear that reasonable outlay should not be grudged on an enterprise so remunerative as the Indo-European telegraph. For many other reasons, which I need not enumerate, I still cling to the hope that the Turkish line may sooner or later be made over to liberal English management, and I see no reason to alter the general tenor of the views expressed in my former letter on the subject. I believe, however, that such a proposal as I ventured to submit before leaving England could not be put forward with any chance of acceptance unless the Turkish lines were working far worse than at present, and it would be decidedly bad policy to hint at a change which, under any circumstances, would meet with the greatest opposition, unless our main argument, founded on Turkish incapability, were irrefutable.

XXVII. Hitherto every one seems to have decided that the weak point in the system lies in Turkey, and I, at least, have never attempted to deny the fact; but, at the same time, I think it my duty to draw your attention to imperfection in the management of affairs elsewhere. The Constantinople line is not the only one between England and the Persian Gulf, and the Indo-European line continually gets blamed for faults for which it is nowise responsible. I might refer to my letter, No. 214, of the 31st of August 1865, for one instance, the facts of which are briefly as possible. In June 1865, the London Telegraph Companies, misled, I understand, by some newspaper paragraph, took upon themselves to divert more than 400 messages from the regular line, and to send them *viâ* Russia. Now the average time by the regular line, as will be seen on reference to Appendix B., was two days eight hours, and three days 20 hours, for May and June respectively, between Constantinople and Kurrachee. None that went *viâ* Russia took less than 30 days, and most of them reached Teheran in an unintelligible form, the line not having been opened to the public by the Russian authorities. The Indo-European line got the blame of this mismanagement, which was entirely due to the London offices, which had no right to make an experiment on so extensive a scale with private messages. I did my best to prevent a recurrence of such mishaps, but I regret to say that numbers of messages have been passing quite recently *viâ* Russia, no doubt to the disgust of the senders and recipients. I cannot believe that the London offices still persist in using that line after the warnings they have received; but I imagine that messages not being labelled *viâ* Constantinople are diverted on the Continent. The fact is, the Russian is far cheaper than the Turkish route, but as yet completely untrustworthy; not, I believe, from faults in Russia, but from breaks down in Persia. The sender, probably, believes that his message will go by the ordinary line, and pays the full amount; but where the balance of the Turkish over the Russian charge goes I have never been able to discover. When last I heard from Teheran, numerous messages were still passing *viâ* Russia to India, although the line in Persia had broken down, and the telegrams had to be forwarded by courier. Yet the Turkish line was at that time in complete order. Between the 1st and 12th of February 128 messages passed by the Russo-Persian line. The longest time was 20 days, 15 hours; the shortest, 16 days; and the mean time, 17 days, 8 hours, and 3 minutes between London and Kurrachee. It is the duty of the London offices, where they receive payment for a despatch *viâ* Constantinople, to take proper measures, and to see that it goes that way; but the officers of the Indo-European Telegraph, who have no connection with the Continental Administrations, are absolutely powerless, although they and the Turks receive the blame for all delays.

XXVIII. A few weeks ago an attempt was made to forward telegrams to India, *viâ* Malta, Alexandria, Gaza, Beyrout, Diarbekir, and the Persian Gulf; but this was very soon put a stop to, by Agathon Effendi plainly stating that he was unprepared for such traffic between Gaza and Diarbekir.

XXIX. The surest remedy for all difficulties of this nature is to revert to the system of accounts originally proposed by Colonel Stewart, which differs from that now in use, as follows: at present the London Office receives the whole price of a message from London to India, deducts its share, hands on the rest to Holland or France, and so on to each successive administration, as far as Constantinople. At Constantinople the Turks take what is due to them for transit as far as Faô, and make over the balance to our commissioner, Mr. Courtenay, for the cable dues.

XXX. Colonel

XXX. Colonel Stewart's system would be that the London Office, after retaining its share, would forward to Holland or France only enough to take the message to Constantinople. The balance for Asiatic Turkey and the cable, in fact for the Indo-European line, would be paid to an Indo-European telegraph officer in London, who would be in direct account with Mr. Courtenay, and settle with him. In fact, each message would make a fresh start, as far as payment goes, from Constantinople. By this means messages could not be diverted on the Continent from the Turkish line, for the simple reason that if they took any other route they would not be paid for.

App. No. 20.

System of Accounts originally proposed by Colonel Stewart.

XXXI. I will venture to touch on one other point where I think the Indo-European line has received more blame than it fairly deserves, and in doing so I will simply quote from a letter of Mr. Courtenay, to whose indefatigable exertions at Constantinople the public is much indebted. He remarks:—"With regard to the errors which are ascribed to the Anglo-Indian messages, I have reason to know that a large proportion of these errors creep in on the European lines, and that, comparatively speaking, a small per-centage only can be properly charged upon their despatch through the Turkish dominions. Moreover, the public itself is not unfrequently open to blame in this matter, as some senders string a number of unconnected words together, which it is hazardous to attempt to correct, for fear of altering some pre-arranged conventional code. For instance, the following telegram passed through here on its way to India a few days ago: 'Hability tedbury Thompson flag belsize accumacy Ongley reunioni, agreemen padbod bales indignants claypole insure geometer tabernacle afterwards.' What telegraph official, no matter how attentive and sagacious, would venture to attempt a revision of such a message as this, by way of clerical correction or otherwise? If the telegrams were always despatched in distinct and intelligible words, the clerks specially appointed for the purpose of correcting such despatches arriving in a mutilated form, would be enabled to do their duty in a more efficient and satisfactory manner. Even as it is, a large number of errors are corrected here almost daily in the messages coming from Europe for India, more especially in those arriving through the Italian lines."

Secret messages.

Mr. Courtenay's remarks on secret messages.

XXXII. With regard to these mysterious messages, I would remark, in addition to what Mr. Courtenay writes, that, considering the principle on which the Morse code of signals has been framed, it is simply impossible to guard against mistakes occurring on a long line, unless at each repetition some clue to the meaning of the words be given by the context. Surely secrecy might be ensured by some pre-concerted arrangement, without recourse being had to such an amazing rigmarole as the above specimen.

Difficulty of avoiding error in sending cypher messages.

XXXIII. The Persian Gulf cable appears to have been fulfilling its duties admirably, but it scarcely falls to me, nor indeed am I able from personal knowledge, to speak about it, or about the land line from Kurrachee to Bombay. This letter has already exceeded ordinary limits, and I will conclude by briefly noting the points which should, in my opinion, be borne in mind.

Persian Gulf Cable.

XXXIV. 1st. If possible the Turkish line should be eventually taken over and placed under English management, but until this can be done the Ottoman authorities should be unceasingly urged to spare no reasonable expenses in maintaining the communications, to improve the quality of the material by degrees, to pay a larger number of signallers, to increase the staff of English clerks and of line inspectors, and to do away as much as possible with repetition between Constantinople and Faô.

Proposals for improving the line.

Suggestions.

2ndly. I am of opinion that the Russian line, which is now (not however, from its own intrinsic faults) a source of vexation and disappointment, might be made a valuable link in a duplicate chain of communication with India. On this point I have already written at length.

3rdly. The system of accounts originally proposed by the late Colonel Stewart should be reverted to.

4thly. Until some formal agreement be entered into with Russia (for the purpose of carrying out suggestion No. 2), and until our second wire through Persia be in working order, the English public should be clearly informed that no despatch for India can be safely forwarded, except *via* Constantinople.

5thly. The secretaries of the principal London telegraph companies should be urged to insist on their messages not being diverted on the Continent. Mr. Courtenay will invariably notify by telegram any stoppage which may occur on the Turkish lines; but so long as those lines work better than their Russo-Persian or other rivals, the sender of a message only should be able to direct its transmission otherwise than by the regular channel. And,

6thly. Puzzling cypher messages should not be received at the offices without warning the sender that accuracy cannot possibly be ensured.

XXXV. I have gone into the whole subject at length, because I have reason to believe that the position of affairs is scarcely understood, and because I think that, at the present time, although some of my conclusions may be erroneous, and consequently useless, on the other hand, some of them may possibly prove of service, while the facts which I have stated can be relied on, I trust, as correct, and cannot all as yet be known in England.

Remarks.

App. No. 20.
Regarding Russo-Persian Route.

Severity of the past winter in Persia.
Bad management of Persian Line Guards.

Russo-Persian Line.

XXXVI. Before I conclude I must add a few words in explanation of remarks above, which may at first sight appear condemnatory of the line from Petersburg through Teheran to Bushire. I am informed, on undoubted authority, that, for months past, the line, as far as regards Russia itself, has been working admirably, and that the failure of messages sent by England to India by that route is attributable to breaks down in Persia only. Reports from Teheran describe the past winter as having been one of exceptional severity, so much so that it was absolutely impossible to repair breaks on some of the sections, where wire, posts and all, were for weeks buried under the snow. The bad management of the line guards, and the fact of our only being allowed to use the wire for 12 hours a day, will prevent this line from successfully rivalling that *viâ* Turkey, at least until our second wire (now being shipped for Persia) has been put up and opened to the public. When this is done, and an agreement as to rates, &c. drawn up with the Russian authorities, the Turkish and Russo-Persian lines might fairly compete with one another, and a service message despatched periodically to London would keep the companies informed as to the state of the opposition routes.

I have, &c.
(signed) John U. Champain, Major, R.E.,
Indo-European Telegraph Department.

The Under Secretary of State for India.

APPENDIX (A.)

STATEMENT showing Number of Messages to and from India, from February to December 1865.

Months.		From India.	To India.	Remarks.
February	- -	52	10	
March	- -	579	773	
April	- -	795	1,356	
May	- -	809	1,255	
June	- -	1,080	959	
July	- -	728	1,035	Cable broken, from 5th to 19th.
August	- -	966	871	
September	- -	1,053	1,365	
October	- -	1,189	1,882	
November	- -	1,168	1,200	
December	- -	1,139	1,226	

Supposing the average number of messages, both ways, to be 2,100 per mensem, we must add 33 per cent. to allow for double telegrams. This gives $2,800 \times 2\frac{1}{2} l. = 7,000 l.$ to the cable, exclusive of receipts from messages *viâ* Russia. I believe that the working expenses are about 2,000 *l.* per mensem.

John U. Champain.

APPENDIX (B.)

SUMMARY showing Time occupied in the Trasmission of Messages between Kurrachee and Constantinople, and *vice versâ*.

Months.	From Kurrachee.			To Kurrachee.		
	Longest.	Shortest.	Mean.	Longest.	Shortest.	Mean.
1865:	D. H.	D. H.	D. H.	D. H.	D. H.	D. H.
February	- - 15 4	- - 0 5	- 20	- - 7 0	- - 0 6	- 11
March	- - 6 1	- - 0 5	2 5	- - 6 0	- - 0 5	1 13
April	- - 6 7	- - 0 1	3 0	10 16	- - 0 6	3 11
May	- - 6 0	- - 0 1	2 5	8 5	- - 0 1	2 8
June	- - 7 22	- - 0 0½	2 11	9 4	- - 0 1	3 20
July	- - 5 5	Direct	1 21	6 13	- - 0 8	3 2
August	- - 5 12	"	2 0	6 12	Direct	1 9
September	- - 6 18	"	1 21	6 5	"	1 22
October	- - 12 19	- - 0 11	8 0	7 8	- - 0 2	3 10
November	- - 10 8	Direct	6 6	10 20	Direct	3 0
December	- - 13 4	"	6 20	13 10	- - 0 1	5 6
1866:						
January	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
February	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -

I regret exceedingly that I cannot yet give you the returns for January, February, or March 1866, but I know from inquiries made here, and latterly from the daily reports, that the improvement is very great. I hope to send the returns very shortly.

John U. Champain.

App. No. 20.

Kurrachee, 24 February 1866.

Transmission Inwards from 1st to 12th February 1866.

<i>Viâ Turkey:</i>										D. H. M.
The longest time occupied by a message from the United Kingdom to India was	-	-	-	-	-	-	-	-	-	6 0 0
The shortest time	-	-	-	-	-	-	-	-	-	0 2 30
Mean	-	-	-	-	-	-	-	-	-	1 19 40
(Average of 405 messages.)										

<i>Viâ Russia:</i>										D. H. M.
The longest time was	-	-	-	-	-	-	-	-	-	20 15 0
Shortest	-	-	-	-	-	-	-	-	-	16 0 0
Mean	-	-	-	-	-	-	-	-	-	17 8 3
(Average of 128 messages.)										

A considerable (if not the chief) part of the delay on messages *viâ* Russia was due to interruption on the Persian lines.

(signed) *A. Brasher*, Traffic Manager.

(A.)

EASTWARD.

RETURN showing the Number of Telegrams from the *United Kingdom* to *India*, and the Amounts Due to the Persian Gulf Line for the same, during the Year 1865.

1865.	<i>Viâ Fao.</i>		<i>Viâ Bushire.</i>		TOTAL.	
	Number of Telegrams.	Amount.	Number of Telegrams.	Amount.	Number of Telegrams.	Amount.
		£. s. d.		£. s. d.		£. s. d.
February	-	-	-	-	-	-
March	691	2,132 - -	-	- - -	691	2,132 - -
April	874	2,788 - -	376	968 - -	1,250	3,756 - -
May	551	1,740 - -	556	1,385 - -	1,107	3,125 - -
June	700	2,100 - -	400	900 - -	1,100	3,000 - -
July	500	1,500 - -	400	900 - -	900	2,400 - -
August	679	2,177 10 -	96	223 - -	775	2,410 10 -
September	867	2,788 10 -	335	834 - -	1,202	3,622 10 -
October	1,226	3,905 10 -	385	927 - -	1,611	4,832 10 -
November	927	3,051 - -	102	272 - -	1,029	3,323 - -
December	1,040	3,438 15 -	365	968 - -	1,405	4,406 15 -
	8,055	25,621 5 -	3,015	8,068 - -	11,070	32,998 5 -

Note.—Interruption at Gwadur, cause of the decrease in receipts for July and August.

Thomas Lyne.

App. No. 20.

(B.)

EASTWARD.

RETURN showing the Number of Telegrams from the Continent of *Europe* to *India*, and the Amounts Due to the Persian Gulf Line for the same, during the Year 1865.

1865.	<i>Viâ Faô (Turkey).</i>		<i>Viâ Bushire (Persia).</i>		TOTAL.	
	Number of Telegrams.	Amount.	Number of Telegrams.	Amount.	Number of Telegrams.	Amount.
		£. s. d.		£. s. d.		£. s. d.
February - -	13	57 10 -	1	3 - -	14	60 10 -
March - -	82	269 5 -	-	- - -	82	269 5 -
April - -	95	315 15 -	9	20 - -	104	335 15 -
May - -	110	335 10 -	35	89 - -	145	424 10 -
June - -	109	370 - -	30	78 - -	139	448 - -
July - -	50	180 - -	15	39 - -	65	219 - -
August - -	57	168 15 -	26	71 - -	83	239 15 -
September - -	97	419 10 -	70	200 - -	167	619 10 -
October - -	167	630 10 -	83	204 - -	250	834 10 -
November - -	122	439 15 -	33	98 - -	155	537 15 -
December - -	218	703 15 -	45	151 - -	263	854 15 -
	1,120	3,890 5 -	347	953 - -	1,467	4,843 5 -

Thomas Lyne.

(C.)

WESTWARD.

RETURN showing the Number of Telegrams from *India* to the *United Kingdom*, and the Amounts due to the Persian Gulf Line for the same, during the Year 1865.

1865.	<i>Viâ Faô (Turkey).</i>		<i>Viâ Bushire (Persia).</i>		TOTAL.	
	Number of Telegrams.	Amount.	Number of Telegrams.	Amount.	Number of Telegrams.	Amount.
		£. s. d.		£. s. d.		£. s. d.
February - -	58	178 15 -	-	- - -	58	178 15 -
March - -	532	1,777 10 -	-	- - -	532	1,777 10 -
April - -	508	1,811 - -	216	628 - -	724	2,439 - -
May - -	555	2,016 5 -	176	500 - -	731	2,516 5 -
June - -	682	2,386 15 -	297	808 - -	979	3,194 15 -
July - -	450	1,400 - -	150	400 - -	600	1,800 - -
August - -	716	2,515 - -	149	395 - -	865	2,910 - -
September - -	648	2,323 - -	279	774 - -	927	3,097 - -
October - -	798	2,865 15 -	227	621 - -	1,025	3,486 15 -
November - -	878	3,131 10 -	118	338 - -	996	3,469 10 -
December - -	918	3,360 5 -	48	123 - -	966	3,483 5 -
	6,743	23,765 15 -	1,660	4,587 - -	8,403	28,352 15 -

Thomas Lyne.

(D.)

WESTWARD.

RETURN showing the Number of Telegrams from *India* to the Continent of *Europe*, and the Amounts due to the Persian Gulf Line for the same, during the Year 1865.

1865.	Via Fao (Turkey).		Via Bushire (Persia).		TOTAL.	
	Number of Telegrams.	Amount.	Number of Telegrams.	Amount.	Number of Telegrams.	Amount.
		£ s. d.		£ s. d.		£ s. d.
February - -	10	85 - -	2	9 - -	12	94 - -
March - - -	47	159 15 -	-	- - -	47	159 15 -
April - - -	46	145 - -	26	67 - -	72	212 - -
May - - - -	59	205 15 -	19	53 - -	78	258 15 -
June - - - -	64	215 - -	34	81 - -	98	296 - -
July - - - -	35	112 - -	15	39 - -	50	151 - -
August - - -	71	231 5 -	20	56 - -	91	287 5 -
September - -	83	308 15 -	34	103 - -	117	411 15 -
October - - -	111	416 5 -	42	127 - -	153	543 5 -
November - -	142	514 10 -	21	59 - -	163	573 10 -
December - -	141	531 5 -	21	58 - -	162	589 5 -
	809	2,924 10 -	234	652 - -	1,043	3,576 10 -

India Office, 12th April 1866.

Thomas Lyne

INDO-EUROPEAN TELEGRAPH.

SUMMARY of TRAFFIC as shown in the annexed Returns, marked respectively (A.), (B.), (C.) and (D.), for the Ten Months ending 31st December 1865.

	Via Fao (Turkey).		Via Bushire (Persia).		TOTAL.		GRAND TOTAL.	
	Number of Telegrams.	Amounts.	Number of Telegrams.	Amounts.	Number of Telegrams.	Amounts.	Number of Telegrams.	Amounts.
		£ s. d.		£ s. d.		£ s. d.		£ s. d.
EASTWARD:								
A.) United Kingdom to India	8,055	25,621 5 -	3,015	8,068 - -	11,070	32,998 5 -	12,537	37,841 10 -
B.) Continent to India -	1,120	3,890 5 -	347	953 - -	1,467	4,343 5 -		
WESTWARD:								
C.) India to United Kingdom	6,743	23,765 15 -	1,660	4,587 - -	8,403	28,352 15 -	9,946	31,929 5 -
D.) India to Continent -	809	2,924 10 -	234	652 - -	1,043	3,576 10 -		
							21,983	69,770 15 -

13th April 1866.

Thomas Lyne.

App. No. 20.

INDO-EUROPEAN TELEGRAPH.

RETURN showing Average Time occupied by Telegrams in reaching *Kurrachee* from the United Kingdom since the opening of the Line in March 1865, up to the end of February 1866.

1865-66.				FROM UNITED KINGDOM TO KURRACHEE.			
Month of				<i>Via Russia</i>		<i>Via Turkey.</i>	
				Number of Telegrams.	Average Time in Transit.	Number of Telegrams.	Average Time in Transit.
1865 :				<i>Days. hrs. m.</i>		<i>Days. hrs. m.</i>	
March	-	-	-	-	-	691	5 22 26
April	-	-	-	-	-	1,250	6 0 0
May	-	-	-	-	-	1,107	4 18 0
June	-	-	-	400	30 0 0	700	5 1 40
July	-	-	-	No Return		No Return.	
August	-	-	-	-	-	182	3 6 5
September	-	-	-	-	-	351	7 1 30
October	-	-	-	-	-	400	11 12 10
November	-	-	-	32	11 18 0	997	9 20 0
December	-	-	-	328	13 5 0	1,065	9 10 0
1866 :							
January	-	-	-	326	21 1 5	814	5 19 10
February	-	-	-	228	18 16 3	776	2 9 30
Mean Time				-	-	-	-
				18 22 25		6 10 58	

* Only the telegrams for the last week in each month are taken for these three months.

T. L.

Remarks.—It will be seen by the foregoing return that the average time occupied between the United Kingdom and Kurrachee by each telegram *via* Turkey for the year 1865-6 was under six days and a half, while, on the other hand, those *via* Russia (less than 10 per cent. of the whole number forwarded) occupied nearly 19 days.

In looking at the time occupied by telegrams *via* Turkey, it should be borne in mind that the lines in Turkey pass through an immense tract of country, comparatively speaking roadless, rendering the repairs of any fault which may occur much more difficult than such repairs would be in Europe, where the telegraph lines traverse the roadside, and in many cases that of the railroad, rendering the transport of men and material both easy and quick.

Great delays are of frequent occurrence in Europe, which are partly to be attributed to the inadequate number of wires for the amount of business passing over them. The Continental governments use the telegraph to an extent little credited in England. Thus, from Paris, Florence, Vienna, Berlin, St. Petersburg, and Constantinople, there is a constant flow out and in of thousands of government telegrams weekly; so that it is not an unusual occurrence for the messages emanating from the general public to lie in an office from three to 12 hours waiting an opportunity of being passed on. From a statistical report issued by the Italian government in 1864, I find the number of government telegrams passing over the Italian lines during 1862, was 227,231, the total number of telegrams for 1862 being 3,062,343.

I have had 18 years' experience in telegraph offices, half of that time in Constantinople and the Levant, and taking the foregoing circumstances into consideration, I do not consider the time occupied by telegrams from the United Kingdom to Kurrachee *via* Turkey excessive; but at the same time there undoubtedly remains a large margin for improvement.

The delays *via* Russia are to be attributed chiefly, I imagine, to the premature declaration of the route being ready for traffic. No telegrams have been addressed from England "*via* Russia" since the early part of December; those reaching India by that route since that date have been diverted from the Turkish route for some unexplained (and, as far as known, unwarrantable) reason by the Continental administrations, but by which of them does not yet appear.

Thomas Lyne.

India Office, 23 April 1866.

ACT No. VIII. of 1860.

App. No. 20.

Passed by the Legislative Council of India.

(Received the assent of the Governor General on the 12th March 1860.)

AN ACT for regulating the Establishment and Management of Electric Telegraphs in India.

WHEREAS it is expedient that better provision should be made for regulating the establishment and management of lines of Electric Telegraph in India; it is enacted as follows:

Preamble

I. Act XXXIV. of 1854 (for regulating the establishment and management of Electric Telegraphs in India) is hereby repealed, except as to any act or offence which shall have been done or committed, or to any fine or penalty which shall have been incurred, or to any proceedings which shall have been commenced, before this Act shall come into operation, and except also as to any license for the establishment of a line of Electric Telegraph granted under the said Act. All things done under the authority or in pursuance of the said Act, shall be as valid and effectual as if this Act had not been passed.

Act repealed.

II. Within the British territories in India, the Governor General of India in Council shall have the exclusive privilege of establishing lines of Electric Telegraph. Provided that the Governor General of India in Council may grant a license to any person or company to establish a line of Electric Telegraph within any part of such territories, which license shall be revocable on the breach of any of the conditions therein contained.

Governor General in Council to have the exclusive privilege of establishing electric telegraphs. Proviso.

III. Whoever shall otherwise than under a license duly granted as aforesaid establish, or after revocation of such license maintain, a line of Electric Telegraph within the said territories, shall be liable to a fine not exceeding 1,000 rupees: and for every week during which such line shall be maintained, shall be liable to a further fine not exceeding 500 rupees.

Penalties for establishing or maintaining unauthorised electric telegraphs.

IV. Whoever shall use a line of Electric Telegraph, knowing or having reason to believe that it is an unlicensed line, for the purpose of sending or receiving messages, or shall perform any service incidental thereto, shall, for every such offence, be liable to a fine not exceeding 50 rupees.

Penalty for using or working such telegraphs.

V. The Governor General of India in Council may, on the occurrence of any public emergency, take temporary possession of any line of Electric Telegraph established under license within the said territories.

Government may take possession of telegraphs established by license

VI. Any Railway Company, on being required so to do by the Governor General of India in Council, shall permit the Government to establish upon the land of such company adjoining the line of railway, a line of Electric Telegraph, and shall give every reasonable facility for establishing and using the same.

Government may establish telegraphs on land of railway company.

VII. The Governor General of India in Council may, from time to time, frame rules for the conduct of Electric Telegraphs established by Government, not inconsistent with this Act, and therein prescribe the regulations, conditions, and restrictions, according to which all messages and signals shall be transmitted.

Governor General in Council to frame rules for the conduct of Government telegraphs.

VIII. The Government shall not be responsible for any loss or damage which may occur in consequence of any person employed by the Government in the Electric Telegraph Department failing to transmit with accuracy any message entrusted to him for transmission; and no such person shall be responsible for any such loss or damage, unless he shall cause the same negligently, maliciously, or fraudulently.

Government not responsible for loss or damage.

IX. Whoever shall, without permission, enter into the signal room of a Government Telegraph Office, or shall refuse to quit the same on being requested to do so by any officer or servant employed therein, or shall wilfully obstruct or impede any such officer or servant in the performance of his duty, shall be liable to a fine not exceeding 100 rupees.

Penalty for intruding into signal room, &c.

X. Whoever shall wilfully cause, or attempt to cause any interruption to the transmission of signals along a line of electric telegraph established by the Government, by cutting or injuring the wire, or by injuring any portion of the line or posts or any instrument or apparatus, or by any other means, shall be liable to imprisonment, with or without hard labour, for a term not exceeding two years, or to fine, or to both.

Penalties for cutting the line.

XI. Whoever, being in the employ of the Government in the Electric Telegraph Department, shall wilfully secrete, make away with, alter, or omit to transmit any message which he may have received for transmission or delivery, or shall wilfully or otherwise than by the official order of a Secretary to the Government of India, or Government of Madras or Bombay, or Lieutenant Governor of Bengal, or of the North Western Provinces, or of the

Penalty for omitting to transmit or deliver messages, or for divulging messages, &c.

App. No. 20.	Punjab, or Chief Commissioner of Oude, or such other officers as the Governor General of India in Council shall authorise to give such order, divulge any message, or the purport of any message or signal to any person not entitled to receive, or to become acquainted with the same, shall be liable to be imprisoned, with or without hard labour, for a term not exceeding two years, or to fine, or to both.
Penalty for offering a bribe.	XII. Whoever offers a bribe to any person in the employ of the Government in the Electric Telegraph Department, in order to induce such person to act in a manner inconsistent with his duty, shall be liable to be imprisoned for a term not exceeding six months, or to fine, or to both.
Penalty for misconduct.	XIII. Whoever, being in such employ, shall be guilty of any act of drunkenness, carelessness, or other misconduct, whereby the transmission or delivery of any message shall be endangered, or who shall loiter or make delay in the transmission or delivery of any message, shall be liable to imprisonment, with or without hard labour, for a term not exceeding three months, or to a fine not exceeding 100 rupees, or to both.
Penalties for sending messages without payment to Government.	XIV. Whoever, being in such employ, shall transmit by the electric telegraph any message upon which the prescribed charge has not been paid, intending thereby to defraud the Government, shall be liable to be imprisoned, with or without hard labour, for a term not exceeding two years, or to fine, or to both.
Penalties for sending fabricated message.	XV. Whoever shall transmit, or cause to be transmitted, by an electric telegraph established by Government a message which he knows to be false or fabricated, shall be liable to be imprisoned, with or without hard labour, for a term not exceeding two years, or to fine, or to both.
Jurisdiction beyond limits of Supreme Court.	XVI. Any person not being a European British subject, who shall, beyond the local limits of the jurisdiction of a Court of Judicature established by Royal Charter, commit any of the offences mentioned in Sections X., XI., XII., XIII., XIV., and XV. of this Act, shall be punishable upon conviction by any magistrate within whose jurisdiction the offence shall be committed. If any such offence be committed beyond the said local limits by a European British subject, the offender shall be punishable upon conviction before a Court of Judicature established by Royal Charter.
Jurisdiction within local limits of Supreme Court.	XVII. Any person, whether a European British subject or not, who shall, within the local limits of the jurisdiction of a Court of Judicature established by Royal Charter, commit any of the offences referred to in the last preceding Section, shall be punishable upon conviction before such Court.
Fines how to be adjudged.	XVIII. Any person, whether a European British subject or not, who shall be guilty of any offence, for which, according to the provisions of this Act, he shall be liable to a fine only, shall be punishable for such offence by any magistrate of police for any of the Presidency towns of Calcutta, Madras, and Bombay, or for the settlement of Prince of Wales' Island, Singapore, and Malacca, magistrate, joint-magistrate, or person lawfully exercising the powers of a magistrate, within whose jurisdiction the offence shall be committed; and any person hereby made punishable by a magistrate of police shall be punishable upon summary conviction.
Fines how levied.	XIX. All fines imposed under the authority of this Act, for offences punishable by fine only, by any police magistrate, magistrate, joint-magistrate, or person lawfully exercising the powers of a magistrate, may, in case of non-payment thereof, be levied by distress and sale of the goods and chattels of the offender, by warrant under the hand of any of the above-named officers, and in case any such fine shall not be forthwith paid, any such officer may order the offender to be apprehended and detained in safe custody until the return can be conveniently made to such warrant of distress, unless such party shall give security to the satisfaction of such officer for his appearance at such place and time as shall be appointed for the return of the warrant of distress, and such officer may take such security by way of recognisance or otherwise, and if, upon the return of such warrant, it shall appear that no sufficient distress can be had whereon to levy such fine, and the same shall not be forthwith paid, or in case it shall appear to the satisfaction of such officer, by the confession of the party or otherwise, that he has not sufficient goods and chattels whereupon such fine or sum of money could be levied if a warrant of distress were issued, any such officer, by warrant under his hand, may commit the offender to prison, there to be imprisoned only or to be imprisoned and kept to hard labour, according to the discretion of such officer, for any term not exceeding two calendar months where the amount of the fine shall not exceed 50 rupees, and for any term not exceeding four calendar months where the amount shall not exceed 100 rupees, and for any term not exceeding six calendar months in any other case; the commitment to be determinable in each of the cases aforesaid on payment of the amount.
Imprisonment, if no sufficient distress, &c.	
Authority to punish Government servants who commit offences against this Act in foreign territory.	XX. If any servant of the Government, employed in the Electric Telegraph Department within the dominions of any Foreign Prince or State in alliance with the Government of India in which an electric telegraph is established by the Government, shall within the dominions of such Prince or State commit any act hereby prohibited, or omit to do any act hereby required to be done by any person similarly employed within the British territories in India, such servant of the Government shall be guilty of an offence, and on conviction thereof shall be punished in the same manner as if such act had been done or omitted

omitted within the said last mentioned territories; and every such person may be tried, convicted, and punished either by fine or otherwise, according to the nature of the offence, by any court or officer duly empowered by the Governor General of India in Council to take cognisance of offences committed in such dominions by servants of the Government, or by any court or magistrate or other competent officer in any part of the British territories in India, in the same manner as if the offence had been committed in such part of the said territories.

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XXI. The word "Magistrate" in this Act shall include joint magistrates and persons lawfully exercising the powers of magistrates, and the word "Fine" shall include a penalty or forfeiture.

Explanation of terms.

XXII. It shall be lawful for the Governor General in Council to frame rules for the conduct of any electric telegraph established by license under this Act, and to declare from time to time what portions of this Act shall be applicable to such telegraph and to persons using the same, or employed in connexion therewith. It shall also be lawful for the Governor General in Council to declare from time to time that this Act, or such portions thereof as may be specified, shall be applicable to any electric telegraph established or to be established within the British territories in India by any Foreign Prince or State with the consent of the British Government, and to persons using such telegraph or employed in connexion therewith.

Government to frame rules for telegraphs established by license.

And to declare Act applicable to telegraphs established within British territories by foreign powers.

Appendix, No. 21.

PAPERS handed in by Mr. F. Gisborne, 25 May 1866.

INDIA, SINGAPORE, CHINA, and AUSTRALIA TELEGRAPH.

GENERAL SUMMARY of the Foreign and Local TRADE and SHIPPING that will make use of the Proposed TELEGRAPH LINES (taken from Blue Books).

	Trade, Imports, and Exports.	Shipping. Square-rigged Vessels.		REMARKS.
		Vessels Entered and Cleared.	Tonnage.	
1. Straits Settlements (Singapore Penang, &c., 1863).	£. 20,486,859*	5,453	2,095,028	* Of this 4,481,721 l. was with the United Kingdom.
2. China sea-board foreign trade, and including trade between the 13 open ports, 1864.	86,601,064†	17,976	6,635,505	† External trade of 13 } £. open ports - - - } 38,884,31
3. Java, 1862 - - - -	8,184,489	5,773	805,194	Trade between the 13 } open ports - - - } 47,716,75
4. Australia, 1864 - - - -	38,589,979	1,893	1,121,424	£. 86,601,06
TOTALS - - - - £.	153,862,392	31,095	10,657,151	

STATEMENT showing the TRADE of the following PORTS for the Year 1863-64.

	Singapore.	Penang.	Rangoon.	Moulmein.	TOTAL.
	£.	£.	£.	£.	£.
Imports - - - -	6,347,005	1,719,265	1,690,103	488,453	10,244,826
Exports - - - -	5,397,744	2,568,027	1,734,338	541,924	10,242,033
TOTAL TRADE - - £.	11,744,749	4,287,292	3,424,441	1,030,377	20,486,859*

* Of this amount 4,481,721 l. was with the United Kingdom.

STATEMENT of the SHIPPING and TONNAGE for the same Places and for the same Period.

Square-rigged Vessels.	Singapore.		Penang.		Rangoon.		Moulmein.		TOTAL.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Arrivals - -	1,447	628,568	555	145,760	604	249,314	106	68,817	2,717	1,092,459
Departures - -	1,513	560,074	550	143,928	575	229,752	103	68,815	2,741	1,002,569
TOTAL - -	2,960	1,188,642	1,105	289,688	1,179	479,066	209	137,632	5,453	2,095,028

Statistical Department, India Office,
10 March 1866.

COMMERCIAL REPORTS from HER MAJESTY'S Consul in *China*, 1864 (presented to both Houses, February 1866).

COMPARATIVE TABLE of SEA-BOARD TRADE of *China* (i.e., the 13 Open Ports) with other Countries in 1864, p. 73.

With	Imports.	Re-Exports.	Exports.	TOTAL.
	£.	£.	£.	£.
Great Britain, British Dominions, and Colonies -	17,042,205	-	16,552,385	33,594,590 *
Japan -	610,735	1,017,152	114,982	1,742,870
United States of America -	150,226	-	1,494,286	1,644,512
Sundry countries (France, &c.), p. 71 -	1,188,078	-	714,261	1,902,339
Other Chinese open ports, or international trade, pp. 70 and 71 -	25,582,675	7,212,043	14,922,035	47,716,753
TOTAL - - £.	44,573,919 †	-	33,797,950	86,601,064

* Of this 20,662,332 *l.* with the United Kingdom, and say, 13,000,000 *l.* with India.

† Of these imports 3,679,256 *l.* was treasure.

P. 74, "So that the British trade is about the 10-11th part of the whole of the foreign trade in China, or about 5-7ths of the international trade of China, Chinese re-exports to Chinese ports included. The carrying trade of the 13 ports during 1864 has occupied, entering inwards and clearing outwards, 17,976 vessels, giving a tonnage of 6,635,505 tons."

UNITED KINGDOM with *China*, including *Hong Kong* and *Macao* (taken from Blue Books).

	1864.
	£.
Imports therefrom - - - - -	15,673,930
Exports thereto (British and foreign produce) - - - - -	4,988,402
TOTAL Imports and Exports - - - - £.	20,662,332
	£.
United Kingdom with Japan: Imports - - - - -	1,423,819
Exports (British and foreign produce) - - - - -	666,992
TOTAL Imports and Exports - - - - £.	2,090,811
Philippine Islands: Imports and exports - - - - -	1,574,489
Java: Imports and exports - - - - -	818,660
TOTAL Imports and Exports - - - - £.	4,483,960

	Vessels.	Tonnage.
Number and tonnage of vessels (sailing and steam) entered - - -	296	188,568
Ditto - - - ditto - - - ditto - - - cleared - - -	287	178,292
TOTAL - - -	583	366,860

	1862.
	£.
Total value of merchandise and specie exported to all countries - - -	4,330,853
Value of imports into from all countries - - -	3,853,636
TOTAL Exports and Imports - - - £.	8,184,489

	Vessels.	Tonnage.
Number and tonnage of vessels entered - - - - -	2,819	393,240
Ditto - - - ditto - - - cleared - - - - -	2,954	411,954
TOTAL - - -	5,773	805,194

Treasure imported, 1864.

* It does not appear where this treasure came from.

								1862.
								£.
Exports to China:								
Merchandise	-	-	-	-	-	-	-	10,451,871
Treasure	-	-	-	-	-	-	-	15,358
							Total - - - £.	10,467,229
Imports from China:								
Merchandise	-	-	-	-	-	£. 3,400,199		
Treasure	-	-	-	-	-	995,869		
								4,396,068
							TOTAL TRADE - - - £.	14,863,297

SUMMARY of FOREIGN TRADE of *Australia*, 1864.

IMPORTS AND EXPORTS.	Trade, Imports and Exports.	Shipping.		REMARKS.
		Vessels Arrived and Departed.	Tonnage.	
	£.	£.	£.	
Victoria - - - -	21,005,155	681	501,218	
New South Wales - - -	10,726,841	588	330,280	
South Australia - - -	2,960,026	180	182,194	
Queensland - - - -	448,957	40	33,755	
Tasmania - - - -	888,000	310	- -	Not given.
New Zealand - - - -	2561,000	99	73,977	
TOTALS - - - £.	*38,589,979	1,893	1,121,424	

* Of this, 25,444,222 £. was with the United Kingdom. With other countries the returns only come up to 1862.

1. UNITED KINGDOM WITH AUSTRALIA AND NEW ZEALAND.

IMPORTS therefrom (taken from "Blue Books") 1864.

	£.	£.
New South Wales and Queensland - - - - -	3,154,277	
Victoria - - - - -	4,043,813	
South Australia - - - - -	1,203,809	
TOTAL Goods Imported - - -	8,401,899	
Tasmania and New Zealand - - - - -	1,566,703	
Gold (all Australia) - - - - -	2,656,971	
TOTAL Imports - - -	-	12,625,573
Exports (British and Foreign produce):		
New South Wales and Queensland - - - - -	3,485,954	
Victoria - - - - -	5,776,509	
South Australia - - - - -	1,188,526	
Tasmania and New Zealand - - - - -	2,364,660	
TOTAL EXPORTS - - -	- -	12,815,649
TOTAL IMPORTS AND EXPORTS - - -	- -	25,441,222
2. Australian trade (Imports and Exports, 1862) with India and China - - - - -	- -	2,596,256
3. Ditto with Continent of Europe and North America - - -	- -	10,552,501
TOTAL Foreign Trade of Australia - - - £.	- -	38,589,979
4. Number of Vessels, Sailing and Steam, and Tonnage, 1864:	Vessels.	Tonnage.
United Kingdom to Australia and New Zealand - cleared	478	408,263
Ditto - - - - ditto - - - - entered	146	127,362
TOTAL - - -	624	535,625
Australia to India, China, Continent of Europe, and North America, cleared and entered - - - - -	1,269	585,799
TOTAL FOREIGN SHIPPING OF AUSTRALIA - - - £.	1,893	1,121,424

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27 June 1862.

A DEPUTATION connected with the Anglo-Australian and China Telegraph waited upon Sir Charles Wood on the 27th June 1862, at the India Office, concerning the establishment of telegraphic communication between India and China and India and Australia, *via* Singapore. The deputation was introduced by the Honourable A. Kinnaird, M.P., and consisted of the following gentlemen: Sir Stuart Donaldson, Messrs. J. Halliday, J. P. Watson, S. W. Hyde, H. C. E. Childers, M.P., J. Ogle, T. W. Evans, M.P., R. B. Wade, Peek, T. M. Weguelin, M.P., F. Gisborne, Fleeming Jenkin, C. H. Ebdon.

Statements were made with reference to the subsidies already voted by the Australian Legislatures for the Java-Queensland line, and those expected from the French Government for a line between Singapore and Saigon.

The proposition laid before Sir Charles Wood was that the Indian Government should give a subsidy towards the section between Singapore and Rangoon, contingent on the successful working of the cable.

Sir Charles Wood informed the deputation that until he was assured by the Treasury that the outlying telegraphic lines from Australia to Singapore on the one side, and from Hong Kong to Singapore on the other, were in a state of actual forwardness, or certain to be completed, he, as representing the Government of India, could not move in relation to the India and Singapore line; but that, upon his receiving such assurance from the Imperial Government, he, as Secretary of State for India, would feel it to be his duty either to carry out as a Government work, or to assist by subsidy or otherwise, a private company to complete the line from Rangoon to Singapore.

Sir Charles Wood's Answer to Baron Bentinck, re Rangoon-Singapore Telegraph.

EXTRACT from *F. Gisborne's Letter to C. H. Ebdon*, dated The Hague, 1 February 1864.

THE Secretary General to the Foreign Office read to me this day portions of a despatch from Baron Bentinck, dated the 26th ultimo. It was stated in that despatch that Sir Charles Wood, in answer to Baron Bentinck, told him that there was a well-founded hope that the telegraph line between Bagdad and India would be completed next spring, and that as regards the Rangoon-Singapore Telegraph, no concession had as yet been given to any company, nor had any decision been as yet come to upon the matter.

EXTRACT from *F. Gisborne's Letter to C. H. Ebdon*, dated The Hague, 19 March 1864.

P. S.—Baron Bentinck has received another answer from our Government about the Rangoon-Singapore telegraph, dated about the 6th instant, stating that Government are not prepared at present to subsidise either the Rangoon-Singapore or Australian line.

EXTRACT from a Letter from the late East India Company's Board of Directors, to the India Board, dated East India House, 14 July 1858.

4. As, however, it appears, from Mr. Gisborne's letter, now under notice, that the concession granted to him by the Netherlands Government is limited in time, and is conditional upon an assurance that the link between Rangoon and Singapore will not be left undone, the court cannot hesitate to express their opinion that when measures have been matured for making such remaining portions of the line as may be required to complete the telegraphic communication between this country and Australia, it would be the duty of the Indian Government to take steps for the simultaneous construction of that part of the line which lies within its jurisdiction.

The Secretary, India Board.

I have, &c.
(signed) *J. D. Dickinson.*

Dear Sir,

I HAVE made inquiries about the projected telegraph from Kiahkia to Peking, and no further information on the subject seems to have reached the Foreign Office beyond that which you already know, *viz.* that the Chinese Government refused the concession.

F. Gisborne, Esq.

I am, &c.
(signed) *Henry Harvey.*

TELEGRAPHS TO INDIA.

1. *Viâ Turkey and Asia Minor (existing line).*

	<i>Stat. Miles.</i>
Belgrade to Constantinople - - - - -	590
Constantinople to Baghdad - - - - -	1,314
Baghdad to Bussorah (Head of Persian Gulf) - - - - -	320
Belgrade to Bussorah - - - - -	2,224

2. *Viâ Persia (existing line).*

	<i>Stat. Miles.</i>
Russian Frontier to Teheran, say - - - - -	480
Teheran to Bushire - - - - -	697
<i>(Vide Blue Book, 15 Feb. 1864, p. 31, relating to Telegraph to Persia.)</i>	
Russian Frontier to Bushire - - - - -	1,177

3. *Viâ Egypt, Palestine, and Asia Minor (existing line.)*

	<i>Stat. Miles.</i>
Alexandria to Diarbeker <i>viâ</i> Aleppo, say - - - - -	1,103
Diarbeker to Bussorah - - - - -	900
	2,003

4. *Via Egypt and Red Sea (proposed line).*

	<i>Stat. Miles.</i>
Alexandria to Massowah (Red Sea), <i>viâ</i> Valley of the Nile to Shandy - - -	2,333

The above distances are taken from Sir H. Rawlinson's pamphlet on the Overland Telegraph to India (1861), and show the extent to which we are dependent for our telegraphic communication with India upon the Turkish, Persian, and Egyptian Governments respectively.

The line through Europe and *viâ* the Malta and Alexandria cable to Egypt, and thence through Palestine *viâ* Diarbeker to the head of the Persian Gulf and India, has many of the advantages of the proposed Red Sea and India line, commencing at Massowah on the Red Sea and terminating at Kurrachee, where the Persian Gulf cable also terminates.

As far as Alexandria, the route is common to both the lines under comparison, and from Massowah in one direction, and the head of the Persian Gulf in the other, to India, the lines are or will be in English hands, and both of them submarine and in shoal water.

So far, therefore, there is nothing to show between them, and the point of comparison lies between the line from Alexandria to Massowah, which is 2,333 miles in length, and that from Alexandria to Diarbeker and the head of the Persian Gulf; this line is 2,003 miles long. It is only desired to indicate the real point of comparison without discussing it.

23 April 1866.

F. Gisborne.

21 Gresham Street, E. C.

Monsieur,

Londres, le 23 Juin 1864.

LE Gouvernement de l'Empereur auquel j'ai transmis la demande que MM. les Directeurs de la Compagnie Télégraphique Anglo-Australienne m'ont adressée dans le courant du mois de Février dernier, en vue d'obtenir le concours de la France, me charge de vous annoncer qu'après un examen attentif du projet que lui a été soumis, l'établissement d'une ligne télégraphique que se dirigerait sur Saigon et la Chine lui a paru avoir une importance réelle pour les intérêts Français. Il est, en conséquence, disposé à prendre les mesures nécessaires pour que toutes facilités soient données à la Compagnie Anglo-Australienne pour l'atterrissement de son cable à Saigon: toutefois le Gouvernement de l'Empereur croit devoir renfermer dans ces limites la promesse de concours qu'il fait à la Compagnie. D'une part, en effet, il ne juge pas à propos d'accorder à titre exclusif le droit d'établir à Saigon une station de la ligne projetée, et d'autre part, il ne saurait assurer à la Compagnie Anglo-Australienne aucun concours financier, en présence de l'obligation où se trouve le Ministère de l'Intérieur dans l'état actuel des diverses communications télégraphiques, de réserver ses ressources pour des entreprises que touchent de plus près aux intérêts de l'Empire.

Recevez, &c.,
(signé)L'Ambassadeur de France,
*Pce. de la Tour d'Auvergne.*Monsieur C. H. Ebdon,
Président de la Compagnie Télégraphique
Anglo-Australienne.

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(Translation.)

TELEGRAPH from *Java*, through *Sumatra*, to *Siak*, opposite *Singapore*.

The following notice is taken from the *Java* "Courant," of the 27th February 1866, No. 17.

In accordance with a letter received from the Colonial Minister, his Majesty the King has, with the sanction of the Cabinet of the 9th December 1865, No. 56, authorised the Indian Government to construct the following telegraphic connections, viz. :

A land line between Telok-Betong (Lampung districts, south part of Sumatra) and Palembang.

A submarine line between Sumatra and Java, and such line in case of failure to be replaced by optician telegraphs, to be placed on both sides and intermediate isles, as well as by a small powerful steamer.

A land line from Palembang, *viâ* Benkoelen and Padang to Siak.

SINGAPORE-BATAVIA TELEGRAPH.

The cable was the same as that used for the Red Sea and India Telegraph, weighing only 22 cwt. per knot.

EXTRACT from *F. Gisborne's* Diary at the Hague.

11th August 1862.

HAD a long conversation this day with J. Groll, the Government engineer in Java, who superintended the laying of the Singapore-Batavia cable in 1859, and was afterwards engaged repairing it for one year, when it finally broke down, though repairs were subsequently attempted. He would have it that the cable would have been broken by anchors wherever it was laid, even in the open sea east of Banca. I told him that Admiral Rattendijke (Minister of Marine) and others said it would not. He answered that vessels continually anchored in the whole of that sea. He had commanded the mail steamer between Batavia and Singapore; the course of the mail, however, was inside (W.) of Banca, where also the cable was laid in about 11 fathoms of water. He added that, from want of landmarks, it would be very difficult to find the cable if laid E. of Banca, whilst where it was laid it had been easily found. He said he had wanted the cable to be laid on the mudbank along the coast of Sumatra in three fathoms water, and he was decidedly of opinion that that was the best locality for it. Messrs. Newall & Co. had laid this cable very taut, being the same principle which they had adopted in the case of the Red Sea and India cable. Mr. Groll said that in repairing the cable it was found to be kinked where it happened to have been laid slack, and was not kinked where it had been laid tight; this was the case where there was any current, which existed almost everywhere along the course the cable was laid in.

During the year Mr. Groll had charge of the repairs, the cable was broken 30 to 40 times by anchors. He said that the iron wire had rusted more over some portions of the bottom than over others; that the live coral was rather advantageous than otherwise, as it grew over the cable, though inside the coral the iron was generally found rusted. He said he had never himself seen the gutta percha eaten through by the teredo, but he had the most specific accounts that such had been the case; he had himself seen the worm spring out on bending back the core. The holes were generally not perceptible till that was done. The teredo had not pierced the core till the iron wire had rusted away, and he thought the teredo would not eat the bituminous compound with which we proposed to cover the iron wires; he thought, however, the compound would drop off.

He said that the cable had once worked 59 days consecutively, and when at work had earned 6 per cent. excluding only the cost of repairs.

He felt satisfied it would pay to lay a good cable. He said the gutta percha had remained as good as ever, but now that the teredo had attacked it, the line was gone irreparably; it was out of the question to attempt to repair it.

He thought that in a shallow sea with an even bottom a cable should be laid tight.

He did not disagree with me that 50 to 100 fathoms might be the best depth; but as between Singapore and Batavia where the depth did not anywhere exceed 25 fathoms, he preferred laying the cable along the Sumatra mudbank in three fathoms.

He said the tariff had been two dollars for 25 words, and that every mail 40 to 50 messages were sent.

He thought the best route to Australia was from Madura (near Java) to Macassar, (Celebes) thence to Timor, and so on to the northern coast of Australia.

(Translation.)

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Ministère des Colonies,

La Haye, le 20 Août 1862.

EN réponse à votre lettre du 7 de ce mois, que vous avez adressé au Ministre de la Marine, j'ai l'honneur de vous faire part que les informations sur l'état du fond de la mer entre le Cap Sedano et Coepang ont été demandé par moi au Gouverneur Général des Indes Néerlandaises.

Le Ministre des Colonies,

À Monsieur F. Gisborne, Hotel Paulez.

(signé) G. N. Uhlenbeck.

ENGINEERS' REPORT to the Chairman and Directors of the Anglo-Australian and China Telegraph Company (Limited), with reference to carrying out Telegraphic Communication between *Rangoon* and *Singapore*.

Gentlemen,

6, Duke-street, Adelphi, 22 February 1865.

AT your meeting, held on the 15th August, we received instructions to report upon the question of establishing telegraphic communication between Rangoon and Singapore; and especially to take into consideration how far it would be advisable to carry out this work, or any part of it, by means of land-lines.

We have now the honour to state, that we have made inquiries and carefully considered the question, and have consulted, among others, the following gentlemen, who have all much personal knowledge of the country through which the proposed land-line would pass; viz.

Mr. Edmund Blundell	-	Formerly Governor of the Straits Settlements.
Captain Magrath	- - -	Bombay Artillery, late Inspector of the Government Telegraph Lines at Moulmein.
Captain R. Sprye	- -	Late of the Indian Army, and some time Resident at Moulmein, &c.

The information we obtain from them and other sources is as follows:

That the land lines of the Indian Government have been completed from Rangoon, in the direction of Singapore, to Moulmein, by a circuitous route *viâ* Tongo, and we are informed that this portion of the line works fairly.

The line is not made between Moulmein and Amherst, but we are informed that the Indian Government had contemplated the construction of this line some years ago, and were only prevented doing so by the mutiny.

From Moulmein southwards to the extreme point of British territory, a distance of about 420 miles, all authorities that we have consulted prefer a line running close by the coast to one in the interior; and we are informed that there would not be much difficulty in carrying a line as far as Tavoy, a distance of about 150 statute miles.

From Tavoy to the limit of British territory the country is much intersected by rivers, all of which must be crossed by the line at or near their mouths, in some cases probably by short submarine cables. On this portion of the line it would be impossible in many places to avoid the jungle, which consists of large forest trees, with a thick growth of underwood.

There are no roads over which materials could be conveyed, but all would have to be carried by sea.

The natives are few in number, and are harmless and little civilised; they are not likely to damage the line, and are reported as industrious, and willing to work for from 10 to 15 rupees per month.

The coast along which this line would have to be carried and maintained is subject, during the south-west monsoons, to constant gales from May till November, but not perhaps sufficiently violent to endanger the line. The climate during this period of seven months is excessively wet and damp, and much lightning is experienced at its end and commencement.

From latitude 10 degrees north to Singapore the country does not belong to England. As far as Penang the population is scanty, unsettled, and uncivilised; from thence to Singapore, although the country is not ours, Mr. Blundell states that perhaps the safety of a land-line might be more easily insured; but he is of opinion that a submarine line would be preferable.

The foregoing statements are further confirmed by the evidence of Captain Dicey, of the Indian Navy, and many persons acquainted with the country whom we have either seen or corresponded with.

There can be no doubt that land-lines, in a civilised country such as England, are more economical than submarine lines, and more readily repaired; but in foreign countries, even as civilised as most parts of India, we consider a well-constructed submarine cable, laid in moderate depths, more to be depended upon for maintaining uninterrupted communication.

Their relative cost of construction may be taken as about one to three; but the maintenance of the land-lines in such countries is more costly than that of a submarine line, and land-lines in the Malay peninsula would, without doubt, be subject to much more frequent interruptions than a submarine cable laid in the adjoining sea, which, according

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to the very careful surveys which have been made and published by the Government, presents most favourable conditions.

A large and costly staff would be required to be kept up for the land-transmitting stations, and for watching the line, and keeping the jungle cleared. The line would be liable to frequent interruptions from the falling of trees and other accidental causes, and from lightning, which, striking the wires at any point, would enter the short lengths of cables employed for crossing the rivers, and would destroy their insulation. Its working would also be unsatisfactory during the wet season of the south-west monsoons, from the dampness of the climate. During this period of seven months the country is much inundated near the sea coast, and communications with the different stations and along the line could only be imperfectly maintained. The greater part of the line would be situated in an almost uninhabited country, without roads, and with stations of necessity very far apart; and whenever interruptions occurred it would take a considerable time for a working party to discover and repair the break.

From the official reports of the Indian Government, we find that, even in their best districts, the interruptions of their lines are frequent, and of considerable duration; and the cost of their maintenance averages, over their whole system of 11,500 miles of wires, 3 *l.* 10 *s.* per mile per annum, or five times the cost of maintenance in England. We find that in the Pegu circle it is still more costly, averaging 9 *l.* 10 *s.* per mile for wire; and the interruptions are also more frequent, in about the same proportion.

From a careful consideration of the whole question, we are of opinion that a land-line might probably be extended with advantage, from the present terminus of the Indian lines at Moulmein, to Tavoy, a distance of about 150 miles.

From thence to Singapore we consider that, in the present unsettled state of the country, the physical difficulties are such that we could not recommend a land-line over any portion of the route.

We estimate that the saving of cost, if these recommendations are carried into effect, will be about 40,000 *l.* as compared with the submarine route direct from Rangoon.

We are, &c.
(signed) *Bright & Clark,*
Forde & Fleeming Jenkin, } Engineers.

To the Directors of the Anglo-Australian and China
Telegraph Company (Limited).

ABSTRACT of proposed system of TELEGRAPH LINES between India, China, Japan, and Australia.

Number of		NAME OF DIVISION OR SECTION.	Distances between Stations.				Soundings and Nature of Bottom, &c.				GENERAL OBSERVATIONS.
Division.	Section.		Submarine Lines.		Land Lines.		Soundings.				
1.	2.	3.	Each Section. 4.	Total. 5.	Each Section. 6.	Total. 7.	Maximum. 8.	Minimum. 9.	Mean. 10.	11.	
1.	-	<i>Rangoon, to Singapore ;</i>	<i>Knots.</i>	<i>Knots.</i>	<i>St. Mls.</i>	<i>St. Mls.</i>	<i>Fms. Approximate.</i>	<i>Fms.</i>			
	1	Rangoon to Coast -	-	-	40	-	- Land line.	15	20	Apparently very favourable and even.	The cost of this system will be about 500,000 L.; the estimated net annual receipts about 81,000 L., or over 16 per cent. per annum.
	2	Coast to King Island -	305	-	3	-	30	20	35	Ditto - ditto.	
	3	King Island to Penang -	522	-	20	-	45	20	25	Ditto - ditto.	
	4	Penang to Singapore -	373	-	4	-	50	8	28		
		TOTALS - - -	-	1,200	-	67					<i>Memo.</i> —Estimate based on a four ton cable for 60% of the distance, and a seven ton cable for 40% of the distance.
						1,258 knots.					
2.	-	<i>Singapore to China and Japan :</i>									
	1	Singapore to Saigon -	643	-	54	-	57	12	24	Apparently very favourable and even.	The cost of this system will be about 1,200,000 L.; the estimated net annual receipts about 218,000 L., or over 18 per cent. per annum.
	2	Saigon to Hainan -	620	-	55	-	60	15	40	Even, but apparently rocky in parts.	
	3	Hainan to Hong Kong -	340	-	5	-	34	20	35	Apparently very favourable.	
	4	Hong Kong to Amoy -	292	-	40	-	25	14	20	Even, but rocky in parts.	
	5	Amoy to Foo-chow-foo -	200	-	35	-	52	15	30	Favourable.	
	6	Foo-chow-foo to Shanghai -	383	-	30	-	55	8	40	Generally favourable; about 80 knots in very shallow water.	
	7	Shanghai to Nagasaki -	447	-	45	-	112	25	50	Very favourable. M. S. & Sh. G. S., dK. S. (crib. to a very slight extent).	
		TOTALS - - -	-	2,945	-	274		35			
						3,183 knots.					
3.	-	<i>Singapore to Australia :</i>									
	1	Singapore to Banca -	280	-	20	-	22	12	15	Even, and apparently free from rocks.	The cost of this system will be about 760,000 L.; the estimated net annual receipts about 118,000 L., or about 15½ per cent. per annum.
	2	Banca to Batavia -	280	-	13	-	30	10	18	Even, with occasional patches of rock.	
	3	Batavia to C. Sedano -	-	-	680	-	- Land line.	-	-		
	4	C. Sedano to Macassar -	333	-	3	-	100	17	40	Not very even, rocky in parts, and requires many more soundings.	
	5	Macassar to Delhi -	420	-	3	-	- Partially unsounded	-	-	First 80 knots under 40 fathoms, remaining 340 knots unsounded, and probably deep.	
	6	Delhi to Adelaide Bay -	453	-	2	-	- Ditto - ditto	-	-	First 200 knots unsounded, and probably deep, remaining 253 knots from 65 to 23 furlongs, and bottom even.	
		TOTALS - - -	-	1,766	-	721					The cost of the three systems together will be about 2,460,000 L.; the estimated net annual receipts about 417,000 L., or about 17 per cent. per annum.
			-	5,911	-	1,062					
						2,891 knots.					
						6,882 knots.					
						GRAND TOTALS - - -					

The cost of this system will be about 500,000 £.; the estimated net annual receipts about 81,000 £., or over 16 per cent. per annum.

Memo.—Estimate based on a four ton cable for 60 % of the distance, and a seven ton cable for 40 % of the distance.

The cost of this system will be about 1,200,000 £.; the estimated net annual receipts about 218,000 £., or over 18 per cent. per annum.

Memo.—Estimate based on a four ton cable, with about 10 % shore ends of 10 tons per knot.

The cost of this system will be about 760,000 £.; the estimated net annual receipts about 118,000 £., or about 15½ per cent. per annum.

Memo.—Estimate on a four ton cable, with about 7 % shore ends of 10 tons per knot.

The cost of the three systems together will be about 2,460,000 £.; the estimated net annual receipts about 417,000 £., or about 17 per cent. per annum.

Appendix, No. 23.

App. No. 23.

PAPERS laid before the Committee by the Clerk of the Committee.

LETTER addressed to the Committee from Mr. Moor.

To the Committee of the Honourable the House of Commons appointed to Inquire into the
TELEGRAPHIC and POSTAL COMMUNICATION between *England* and *India*.

Mediterranean Extension Telegraph
Company, 158, Gresham House,
Old Broad-street,
London, 13 June 1866.

Gentlemen,

UNDERSTANDING that Mr. Glass in his evidence before your Honourable Committee stated, "That if there was an administration occupying only 60 miles of line (meaning the Mediterranean Extension Telegraph Company), and communication was wanted through that administration with the administration beyond, it would involve the last-named administration in hot water."

Further, "That the intermediate administration had served its own views, and had been productive of ill feeling between his, Mr. Glass's, administration and the Italian Government."

As Chairman of the intermediate administration alluded to, viz., the Mediterranean Extension Telegraph Company, I desire, with their permission, to remove from the mind of the Committee any prejudice which Mr. Glass may have raised against my Company.

So far as I know, there have only been two cases of "hot water," as connected with my Company, into which Mr. Glass has fallen with the Italian Government.

I should state, that the Mediterranean Extension Telegraph Company was formed in 1857, and that, except the two cases I shall detail, this Company has worked amicably with the Italian Government, and all other administrations.

First Case.—This arose in 1862, with regard to the Reimbursement of Messages question.

This Company works under the Berne treaty, but in 1862 the lessees of the Malta and Alexandria line, of which Mr. Glass then was, and still is, the principal manager, did not work under it.

Under the Berne treaty reimbursement is granted for messages not delivered, or delivered too late, or delivered in an unintelligible state.

The Malta and Alexandria lessees refused to grant reimbursement, except under some regulations of their own making, one of which was, that such reimbursements should depend on their opinion as to the triviality or otherwise of the claim for reimbursement.

This refusal, and the grounds of it, gave dissatisfaction to the Director General at Turin,

and that official wrote to this Company on the 29th October 1862: "All telegraph administrations adhere to the principal already shown, that of reimbursing according to the number of errors and alterations, 'without regard to their importance, &c. &c.,' but as the Alexandria Direction thinks otherwise, all the claims pending will be settled, less the proportion due from the Direction."

"We advise, however, that we shall publish a notice to the effect that from this time forward no reimbursement will be granted for messages coming from Alexandria, or that route, and that the other administrations will be invited to do the same, as we cannot, nor will, add to the complications in the accounts, that of establishing, examining, and discussing every time, what errors are trivial and what are not."

On the 19th November 1862, the same official wrote that Switzerland adopted the Italian view and said, "Thanking the Malta administration (that is the Mediterranean Extension Telegraph Company) for the communication made to the relative to the Malta and Alexandria Telegraph Administration's refusal to concur in reimbursements for errors committed in their offices, and which they declare trivial, we beg to confirm our determination not to accede, for our part, to a reimbursements advanced by Alexandria's messages coming from or beyond there. We have written to those administrations with which we are in direct relation, to know if they will adopt the same system, and up till now we have received affirmative reply from the Swiss Administration. It is, therefore, established that the Italian and Swiss Administrations will grant any reimbursement for the messages above."

On the 16th January 1863, a notification from the Italian Government reached us, that France and Austria intended to adopt the same course as Italy and Switzerland.

On the 2nd March 1863, the Director General telegraphed that the lessees of the Malta and Alexandria line had then informed him of their willingness to reimburse according to the law of the Berne treaty.

This was all they were asked to do in the first case, and thus ceased the dispute in the first case, by their withdrawing their pretensions. The second case commenced about three weeks after the adjustment of the first case, and a

of the question of duplicate messages. In case also, the lessees of the Malta and Alexandria line refused to be governed by the treaty.

On the 19th March 1863, the Superintendent of the Malta and Alexandria line sent a memorandum to our Superintendent at Malta, of which following is an extract:

Nos. 3,200 and 823 have been received from in duplicate; the second copies having been omitted to Alexandria, I have to inform you we cannot cancel them as requested, and will be charged to you as fresh messages."

Our Superintendent telegraphed this information to the Director General at Turin.

No action however was taken on this, and the lessees remained quiet until the 10th December, when the lessees of the Malta and Alexandria line wrote to our company saying, that in settling accounts for the June quarter, they, the lessees, are asked to write off a small sum for duplicate messages, that they are willing to give the amount in question, but that in future, they should require payment for all messages, duplicate or otherwise; and they conclude with saying, "We neither recognise nor approve of the Italian practise of sending duplicate messages without charge, and we think it is a great pity your company does not take steps to bring to its discontinuance." This was communicated to the Director General. Some communications then took place direct, between that and the lessees of the Malta and Alexandria line, which resulted in a letter from him to our company, dated 22nd March 1864, a copy of which was sent to us.

From this letter it appears that the lessees have withdrawn their refusal to cancel duplicate messages upon the condition that the same "par ampliation" should appear on such cables.

The Director General in this letter states his belief that misunderstandings have arisen from the exact manner in which the lessees' intentions had been made known to him by our company, and suggests a direct correspondence between himself and them.

On this suggestion our company could not object, and at once signified to the lessees their intention to discontinue the direct correspondence on behalf of the lessees with the Italian government.

The direct correspondence was carried on for several months, when the Director General remarked that the old system should be renewed, his company not wishing to throw any difficulties in the way, upon such request, again took upon themselves the trouble of the correspondence, and have continued it up to the present time.

I am informed that Mr. Glass also stated that our company refused any amalgamation with his administration. The question of amalgamation arose in this manner:

In June last year it was suggested by Mr. Glass, and with a slight variation as to the terms of payment agreed to by this company, that a duplicate cable, at the joint cost of this company and Mr. Glass's company, should be laid between Malta and Sicily.

This project was, however, abandoned by Mr. Glass, who proposed amalgamation between the two companies, and which amalgamation was to the following effect:

That a new company should be formed which should comprise the Mediterranean Extension Telegraph Company and the general public.

That the capital of the new company should consist, First, of our preferential capital of 32,000 £. to be taken at par, and our original capital of 120,000 £., to be valued at 60,000 £. That the whole should be paid in shares of the new company at par, and that thereupon our cables should become the property of the new company.

Secondly. That a sum to be named on a future day, should include the cost of a second cable from Alexandria to Sicily, and the repair of our cable from Malta to Sicily.

Thirdly. That a further sum, likewise undefined, but to be named on a future day as the value of the lease from the Government to Mr. Glass and his partners, of the Malta and Alexandria cable, should be paid to the Telegraph Construction and Maintenance Company, to whom Mr. Glass and his partners had sold and assigned such lease.

Fourthly. That there should be a margin for contingencies, and that the direction of the new company should be formed out of the Telegraph Construction and Maintenance Company, and the Mediterranean Extension Telegraph Company. The working staff to be amalgamated, and the officers and staff of the Mediterranean Extension Telegraph Company to be provided for.

This is believed to be strictly what Mr. Glass proposed, but as he did not submit this or any other proposal in writing, there may be some small error.

The terms of this amalgamation were declined, because the Directors of the Mediterranean Extension Telegraph Company considered the scheme impracticable, and not in the interests of the shareholders to accept.

I have, &c.
(signed) *Henry Moor*,
Chairman.

App. No. 23.

MEMORIAL of the Chamber of Commerce and Manufacturers of *Glasgow*.

Unto the Right Honourable Lord Stanley of Alderley, Her Majesty's Postmaster General.

The Memorial of the Chamber of Commerce and Manufacturers of Glasgow, Incorporated by Royal Charter.

Respectfully sheweth,

THAT the memorialists, representing the mercantile community of Glasgow, are deeply interested in the postal service between Great Britain and India, and, having had the subject under their consideration, desire to submit to your Lordship reasons which appear to them to render highly expedient, if not now absolutely necessary, the substitution of a weekly mail to and from Calcutta, *viâ* Bombay, for the existing mail arrangements.

Your memorialists desire to draw your Lordship's attention to the fact that, although there is nominally postal service to Calcutta four times a month, twice *viâ* Point de Galle, and twice *viâ* Bombay, that in consequence of the facilities rendered by railway communication in India, letters dispatched by mail, leaving London on the 10th and 26th of the month *viâ* Point de Galle, are delivered in Calcutta on or about the same day as letters leaving London one week later, and sent *viâ* Bombay; and *vice versâ*, letters leaving Calcutta *viâ* Galle, take a week longer in transit than those *viâ* Bombay; therefore, there are practically only two mails from Bengal to England per month. In point of fact, *viâ* Bombay is now the speediest and most direct route from Bengal to England; and your memorialists would respectfully urge upon Her Majesty's Government the importance of supplementing

the present service by another weekly mail to Bombay.

Your memorialists also desire to call attention to the speed of the transmission of the mail when, on comparison with other services, they are satisfied might be greatly accelerated.

Your memorialists also take the liberty to suggest, that an important benefit to the trade with India would result in the dispatch of the mail on a fixed day of every week from London, instead of, as at present, on certain days of the month.

Your memorialists believe that no loss would accrue to Government from such an arrangement, but if it should be necessary to charge any additional rate of postage to defray the extra expense, the advantage to the community would be great that they have no doubt it would cheerfully be paid.

For the reasons now stated, the memorial respectfully ask your Lordship to take into consideration the whole subject of postal communication with India, with a view to the establishment of a weekly mail to Calcutta *viâ* Bombay.

And your Memorialists will ever pray.

(signed) John Ramsay,
Vice President
J. S. Fleming,
Secretary

Appendix, No. 24.

PAPER handed in by Mr. *Howell*, 17 July 1866.

App. No. 24.

CONTRACT, dated 17 November 1865, between the POST OFFICE and the
PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY.

AUSTRALIAN MAILS.

ARTICLES OF AGREEMENT made this Seventeenth day of November One thousand Eight hundred and Sixty-five between the Right Honourable Edward John Lord Stanley of Alderley, Her Majesty's Postmaster General for the time being of the one part and the Peninsular and Oriental Steam Navigation Company of the other part.

WITNESS that the Company for themselves and their successors hereby covenant with the Postmaster General his executors administrators successors and assigns Her Majesty's Postmaster General for the time being in manner following (that is to say)

1. That the Company will at all times during the continuance of this Agreement or so long as the whole or any part of the services hereby agreed to be performed ought to be performed in pursuance thereof provide keep seaworthy and in complete repair and readiness for the purpose of conveying as hereinafter provided all Her Majesty's mails (in which term "Mails" all boxes bags or packets of letters newspapers books or printed papers and all other articles transmissible by the Post without regard either to the place to which they may be addressed or to that in which they may have originated and all empty bags empty boxes and other stores and articles used or to be used in carrying on the Post Office service which shall be sent by or to or from the Post Office are agreed to be comprehended) which shall at any time and from time to time by the Postmaster General or any of his Officers or Agents be required to be conveyed as hereinafter provided between Point de Galle in Ceylon and Sydney in New South Wales *viâ* King George's Sound and Melbourne a sufficient number of good substantial and efficient steam vessels of adequate power and supplied with first rate appropriate steam engines.

Company to provide steam-vessels to convey mails between Point de Galle and Sydney *viâ* King George's Sound and Melbourne.

2. That the vessels to be employed under this agreement shall be always furnished with all necessary and proper machinery engines apparel furniture stores tackle boats fuel lamps oil tallow provisions anchors cables fire pumps and other proper means for extinguishing fire lightning conductors charts chronometers nautical instruments and whatsoever else may be requisite for equipping the said vessels and rendering them constantly efficient for the service hereby agreed to be performed and also manned and provided with competent officers with appropriate certificates granted pursuant to the Act or Acts of Parliament in force for the time being relative to the granting certificates to officers in the merchant service and with a sufficient number of efficient engineers and a sufficient crew of able seamen and other men to be in all respects as to vessels engines equipments officers engineers and crew subject in the first instance and from time to time and at all times afterwards to the approval of the Postmaster General or of such other person or persons as he shall at any time or times or from time to time authorise to inspect and examine the same and the Company shall (if required by the Postmaster General) submit the designs plans and sections of every vessel intended to be employed in the performance of this Agreement to the Postmaster General and be bound to adopt such fittings and scantlings as he or the Lords Commissioners for executing the office of Lord High Admiral of the United Kingdom of Great Britain and Ireland shall consider suitable and requisite and no vessel shall be employed under this Agreement until it and its machinery shall have been previously tried under weigh and finally approved as aforesaid.

Vessels to be equipped and manned and subject to approval.

Designs to be submitted to the Admiralty.

App. No. 24.

Times of starting.

3. That one of such vessels so approved equipped and manned as aforesaid shall on such days and at such hours as shall be fixed by the Postmaster General upon or before the day hereinafter appointed for the commencement of this agreement (until and unless any other days or hours shall under the proviso herein in that behalf contained be substituted instead thereof) and immediately after the mails are embarked put to sea from the ports of Point de Galle and Sydney and the Company shall convey in such vessels to and from and cause to be delivered and received at such of the ports or places hereinbefore mentioned all such Mails as shall or may be tendered or delivered to or received by the Company or any of their agents officers or servants by or from the Postmaster General or any of his officers or agents.

Postmaster-General may delay starting for 24 hours.

4. That should it be deemed by the Postmaster General his officers or agents requisite for the public service that any vessel to be employed under this Agreement should at any time or times delay her departure from any port from which the Mails are to be conveyed under this Agreement beyond the period appointed for her departure therefrom the Postmaster General his officers or agents shall have power to order such delay (not however exceeding 24 hours) by letter addressed by him or them to the master of any such vessel or person acting as such and which shall be deemed a sufficient authority for such detention.

Duration of voyages.

5. That the Company shall convey the said Mails from Point de Galle *viâ* King George's Sound and Melbourne to Sydney in 516 hours and from Sydney *viâ* Melbourne and King George's Sound to Point de Galle in 564 hours which several periods of 516 hours and 564 hours respectively are exclusive of stoppages for the purpose of the delivery and reception of Mails the duration of which will be from time to time fixed by the Postmaster General. And it is hereby agreed that if the Company shall fail to deliver the said Mails at Sydney from Point de Galle in 516 hours or at Point de Galle from Sydney in 564 hours then or in either of such cases and so often as the same shall happen the Company shall forfeit and pay to Her Majesty her heirs and successors the sum of 200 £. for every complete period of 24 hours consumed on the respective voyages beyond the periods hereinbefore respectively specified. Provided always that the full amount of such sums payable on any one voyage shall never exceed the portion of the sum of the subsidy hereinafter agreed to be paid by the Postmaster General as applicable to such voyage and provided further that the payment of any such sum shall not be enforced against the Company if it be shown by them to the satisfaction of the Postmaster General that the delay has arisen from causes over which they had not and could not have had any control.

Penalty for delay.

Premium for time saved.

6. And the Postmaster General doth hereby covenant to pay to the Company a premium of 50 £. for every complete period of 24 hours by which the time occupied in any voyage from Point de Galle to Sydney shall be less than 516 hours.

Postmaster General may alter times of departure and arrival.

7. That if at any time or times the Postmaster General shall desire to alter the particular days times or hours of departure from and arrival at any of the ports or places to or from which Her Majesty's mails are to be conveyed under this agreement he shall be at liberty so to do on giving three calendar months' previous notice in writing of such his desire to the Company at their offices in London.

And may make certain modifications in the services on terms.

8. That if at any time or times the Postmaster General shall desire otherwise to modify the services hereby agreed to be performed (as for example to increase or decrease the frequency of the conveyance of Mails between any of the ports or places to or from which such Mails are to be conveyed under this Agreement) or to extend the conveyance of such Mails to any other ports or places not specified in this Agreement or to discontinue the conveyance of Mails to any port he shall be at liberty so to do on giving reasonable notice to the Company and on paying to them for such increased or extended services such further consideration and in the event of the services hereby agreed to be performed being reduced on his paying to them such reduced consideration as hereinafter provided or in any case not hereinafter provided as may be mutually agreed upon between the Company and the Postmaster General or failing such mutual agreement by arbitration in the manner hereinafter provided.

Such alterations to be binding on the Company.

9. That the particular days times and hours of departure from and arrival at any such ports or places or other services if any which may be appointed by any such alteration under the two preceding clauses shall for the time being be deemed to be the days times and hours of departure and arrival of mails and other services under this Agreement and shall be observed and kept by the Company accordingly.

Penalties for failing to provide vessels.

10. That if the Company fail to provide an efficient vessel at Point de Galle or Sydney in accordance with the terms of this Agreement ready to put to sea on and at the appointed day and hour then and so often as the same shall happen the Company shall forfeit and pay unto Her Majesty her heirs and successors the sum of 500 £. and also the further sum of 100 £. for every successive 24 hours which shall elapse until such vessel actually proceeds to sea on her voyage in the performance of this Agreement. Provided always that the aggregate amount of the penalties to be recoverable under this clause in respect of any one voyage or contemplated voyage shall not exceed by more than the sum

of

of 2,000/-. the portion of the subsidy hereinafter agreed to be paid by the Postmaster General as applicable to such voyage such portion being in all cases in proportion to the mileage of the voyage or contemplated voyage in respect of which such penalties may have been incurred.

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11. That the Company shall receive and allow to remain on board each of the vessels so to be and while employed in the performance of this Agreement and also while remaining at any port or place to or from which mails are to be conveyed under this Agreement and with or without mails in charge an officer in Her Majesty's Navy to be appointed by the Postmaster General to take charge of the said mails and also a servant of the said officer (if required) and that every such officer shall be recognized and considered by the Company their officers agents and seamen as the agent of the Postmaster General in charge of mails and as having full authority in all cases to require a due and strict performance of this Agreement on the part of the Company their officers servants and agents and to determine so far as relates to the levying of penalties every question whenever arising relative to proceeding to sea or putting into harbour or the necessity of stopping to assist any vessel in distress or to save human life and that the decision of such officer as aforesaid shall in every such case be final and binding on the Company unless the Postmaster General on appeal by the Company thinks proper to decide otherwise: Provided however that the words "to determine every question" shall not confer upon such officer the power of control over the commander of the vessel conveying the said mails.

Company to receive a Naval Officer and servant on each vessel.

Duties of officer.

12. That if the Postmaster General at any time or times think fit he shall be at liberty to substitute for such naval officer and his servant a civil officer in the service of the Postmaster General to have charge of the said mails and thereupon any such last mentioned officer and his assistant (if required) shall be received and be allowed to remain on board each of the said vessels as hereinbefore provided with respect to any such naval officer and his servant but when any civil officer in the service of the Post Office shall be in charge of the said mails his duties shall be confined to the Post Office business.

Postmaster General may substitute a civil for a naval officer.

13. That a suitable first-class cabin with appropriate bed bedding and furniture shall at the cost of the Company be provided and appropriated by them for the exclusive use and accommodation of every such naval or civil officer and also (to the satisfaction of the Postmaster General) a proper and convenient place of deposit on board with secure lock and key for the mails and that every of the said officers shall be victualled by the Company as a chief cabin passenger without any charge either for his passage or victualling and that should any such naval officer require a servant or should any such civil officer require an assistant such servant or assistant shall also be provided with a proper and suitable berth and be duly victualled by and at the cost of the Company as a fore-cabin passenger without any charge being made for the same.

Accommodation for officer and servant to be provided.

14. That the Company shall provide on board each of the vessels to be employed under this Agreement all necessary and suitable accommodation to the satisfaction of the Postmaster General for the purpose of sorting and making up the mails thereby conveyed and on being required by the Postmaster General so to do shall erect on each of such vessels a separate and convenient room the actual cost of erecting such sorting-room and of providing all such furniture lamps and other conveniences as may be necessary or convenient for the purpose of sorting and making up such mails being paid for by the Postmaster General but such furniture lamps and other conveniences being cleansed and kept in repair and the oil for the lamps supplied by the servants and at the cost of the Company.

Also for sorting mails.

15. That at each port or place where the said mails are to be delivered and received the officer having charge of mails shall whenever and as often as by him shall be deemed practicable or necessary be conveyed on shore and also from the shore to the vessel employed for the time being in the performance of this Agreement together with or (if such officer shall consider it requisite for the purposes of this Agreement so to do) without mails in a suitable and seaworthy boat of not less than four oars to be furnished with effectual covering for the mails and properly provided manned and equipped by the Company and that the directions of such officer shall in all cases be obeyed as to the mode time and place of receiving and delivering such mails.

Also a boat to convey officer between vessel and the shore.

16. That if the Postmaster General during the continuance of this Agreement think fit to entrust the charge and custody of the mails to the master or commander of the vessels to be employed for the time being in the performance of this Agreement and in all cases where the officer or other person appointed to have charge of the mails shall be absent the master or commander of such vessel shall (without any charge other than that herein provided to be paid to the Company) take due care of and the Company shall be responsible for the receipt safe custody and delivery of the said mails and each of such masters or commanders shall make the usual oath or declaration or declarations required or which may hereafter be required by the Postmaster General in such and similar cases and furnish such journals returns and information to and perform such services as the Postmaster General or his agents may require And every such master or commander or officer duly authorised by him having the charge of mails shall himself immediately on the arrival at

Postmaster General may require masters of vessels to take charge of mails.

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any of the said ports or places of any such vessel deliver all mails for such port or place into the hands of the Postmaster or other person at such port or place at the Postmaster General shall authorize to receive the same receiving in like manner all the return or other mails to be forwarded in due course and that the crew of each of the said vessels respectively shall assist in conveying the mails between the mail-room and the sorting room to be erected (if required) in each of the said vessels as hereinbefore mentioned.

No letters to be received on board but Her Majesty's mails.

17. That the Company shall not nor shall any of the masters of any of the vessels employed or to be employed under this Agreement receive or permit to be received on board any of the of vessels employed under this Agreement any letters for conveyance other than those duly in charge of the said naval officer or other person authorised to have charge of the said mails or which are or may be privileged by law nor any mails for conveyance on behalf of any colony or foreign country without the consent of the Postmaster General And the said naval officer or other person shall report to the Postmaster General any default in these respects And in case of any such default respectively the Company shall be liable to be proceeded against for a breach of this Agreement.

Postmaster General may survey vessels.

18. That the Postmaster General shall have full power whenever and as often as he may deem it requisite to survey by any of his officers or agents all or any of the vessels employed and to be employed in the performance of this Agreement and the hulls thereof and the engines machinery furniture tackle apparel stores equipments and the officers engineers and crew of every such vessel and any defect or deficiency that may be discovered on any such survey shall be forthwith repaired or supplied by the Company And that for the purposes aforesaid the said vessels shall (if necessary) be opened in their hulls whenever the said officers may require And if any of such vessels or any part thereof or any engines machinery furniture tackle apparel boats stores or equipments shall on any such survey be declared by any of such officers or agents unseaworthy or not adapted to the service hereby agreed to be performed every vessel which shall be disapproved of or in which such deficiency or defect shall appear shall be deemed insufficient for any service hereby agreed to be performed and shall not be again employed in the conveyance of mails until such defect or deficiency has been repaired or supplied to the satisfaction of the Postmaster General.

Postmaster General's orders as to the landing, &c. of mails to be attended to.

19. That the Company and all commanding and other officers of the vessels employed in the performance of this Agreement and all agents seamen and servants of the Company shall at all times punctually attend to the orders and directions of the Postmaster General his officers or agents as to the mode time and place of landing delivering and receiving mails.

Company to convey Government Passengers.

20. That the Company shall when and as often as in writing they or the masters of their respective vessels are required so to do by the Postmaster General or by any naval or other officers or agents acting under his authority (such writing to specify the rank or description of the person or persons to be conveyed and the accommodation to be provided for him or them) receive provide for victual and convey to and from and between any of the ports or places to which any vessels are to proceed in the performance of this agreement on board every or any of the vessels to be employed in the performance of this agreement (in addition to the naval or other officer authorised to have charge of the said mails) any number of naval military or civil officers or other persons in the service of Her Majesty hereinafter described as Government contract passengers (not exceeding four in any one ship) with or without their wives and children as first-class passengers and any number of Government contract passengers (not exceeding two in any one ship) with or without their wives and children as second-class passengers and any number of Government contract passengers (not exceeding ten in any one ship) with or without their wives and children as third class passengers to be berthed below deck (due notice being given if practicable to the Company or to their agent at the port of embarkation of all such passengers as may be required to be received provided for victualled and conveyed as aforesaid) and that whenever the Company shall convey any third-class Government contract passengers (other than those hereinbefore specially provided for) the Company shall provide them with proper accommodation below deck.

Their passage money.

21. That the passage money for all passengers to be conveyed on the requisition of the Postmaster General or any persons acting under or by his authority other than and except the naval officer in charge of mails and his servant (if any) or the civil officer of the Post Office in charge thereof and his assistant (if any) shall be paid in full of all charge for mess and victualling at and after the fares and rates charged by the Company for ordinary passengers of a similar description or in cases where there is no charge to correspond at such rates as may be agreed upon between the Lords Commissioners of the Admiralty and the Company.

Their accommodation.

22. That Government contract passengers shall be treated in no respect whatever in an inferior manner to ordinary passengers of the same class and in a manner at least equal to that required by the regulations of Her Majesty's Transport Service and the messing of the first and second class Government contract passengers shall include each day

day an imperial pint of good sound bottled or draught ale or beer and that of the first class in addition an imperial pint of good foreign wine either port or white. The several classes of Government contract passengers shall mess in separate places and they shall be provided free of extra charge with medical attendance medicine and medical comforts and with mess utensils and fittings cooking utensils articles for table use mess places cabins and berths fuel lights requisite articles of bedding and all other necessities and all third-class Government contract passengers shall have hammocks or bunks subject to the approval of the naval authorities placed between decks.

App. No. 24.

23. That the passage money for Government contract passengers shall be the same as that charged by the said Company for ordinary passengers of a similar kind and shall include everything specified in the last preceding article of this Agreement and the freight of baggage according to Government scale and returns of the embarkation and disembarkation of all Government contract passengers shall be furnished to the Director of Transport services immediately after the departure and arrival of each vessel.

What "passage money" is to include.

24. That whenever any alterations of rates for ordinary passengers shall be made by the said Company notice of such alterations shall forthwith be given by the Company to the Postmaster General and to the Lords Commissioners of the Admiralty.

Company to give notice of alterations of their ordinary passenger fares.

25. That payments for passage money of Government contract passengers shall be applied for by invoices (according to a form to be obtained from the Office of the Director of Transport Services) to be lodged in the office of the Accountant General of the Navy by the said Company or their successors and upon the production to such Director of the orders for the passages together with a certificate under the hand of the Commanding Officer specifying the number of the third-class passengers (men women and children) conveyed with the ages and sexes of such children and stating the periods during which such third-class passengers have been regularly supplied while on board with provisions and also of a certificate under the hand of each first and second class passenger of his or her having been landed at the place of destination and of having been properly accommodated and messed during the voyage and specifying the dates inclusive from and to which they were so messed computed from the first to the last dinner meal and upon the lodging of such invoices as aforesaid bills for the amounts which after examination shall be found to be due thereon shall be made out to the said Company or their successors payable by Her Majesty's Paymaster General in three days from and after the respective dates thereof.

Passage money, how paid.

26. That the passage money for the families and wives of commissioned and civil officers or other persons when not ordered to be conveyed at the public expense shall be paid to the Company by the officers themselves at the rates charged to ordinary passengers of a similar description.

Passage money of families of commissioned and civil officers.

27. That the Company will receive on board of every such vessel any number of small packages containing astronomical instruments charts wearing apparel medicines or other articles and convey and deliver the same to from or between the said ports or places to from or between which the said mails are to be conveyed when and as often as directed by the Postmaster General his Officers or Agents or by the British Naval Officer in command of the station or at any port where the vessel may touch free from all costs and charges and also will receive on board of every such vessel and convey and deliver to from and between all or any of the said ports or places (on receiving from the Postmaster General his officers or agents or from the British Naval Officer in command of the station two days' previous notice) any naval or other stores not exceeding 10 tons in weight or 15 tons of 40 cubic feet each in measurement at any one time in any one vessel at the lowest rate of freight charged by the Company for private goods of a similar description and that the Company shall in all cases be strictly responsible for the due custody and safe delivery of the said packages articles and stores and shall give immediately notice to the said Commissioners of any alteration in the rate of freight charged by them for private goods provided always that stores consisting of liquids chemical preparations or other articles of a dangerous or damaging nature shall not be ordered to be conveyed under this Agreement.

Company to convey Admiralty stores.

28. That all and every the sums of money hereby stipulated to be paid by the Company unto Her Majesty her heirs and successors shall be considered as stipulated or ascertained damages whether any damage or loss have or have not been sustained and shall and may be retained by the Postmaster General out of any monies payable or which may hereafter become payable to the Company or the payment may be enforced as a debt due to Her Majesty with full costs of suit at the discretion of the Postmaster General: Provided however that the payment by the Company of any sums of money by way of penalties shall not in any manner prejudice the right of the Postmaster General to treat the failure if any on the part of the Company to provide a proper vessel or to perform any voyage at or within the times hereinbefore respectively mentioned in that behalf as a breach of this Agreement.

Penalties to be considered as ascertained damages, and may be retained by the Postmaster General.

29. And in consideration of the due and faithful performance by the said Company of all the services hereby agreed to be by them performed the said Postmaster General doth hereby covenant and agree that there shall be paid to the said Company (out of such aids or supplies

Subsidy.

App. No. 24

plies as may be from time to time provided and appropriated by Parliament for the purpose) so long as they perform the voyages between Point de Galle and Sydney and the other services herein contracted to be performed in the manner and with such vessels as herein respectively mentioned the sums of money following (that is to say):—

A sum after the rate of 120,000 *l.* per annum so long as the said Company shall upon the requisition of the Postmaster General cause to be performed one such voyage each way in every calendar month.

A sum after the rate of 130,000 *l.* per annum if and so long as the said Company shall upon the requisition of the Postmaster General cause to be performed on such voyage each way in every lunar month of four weeks.

A sum after the rate of 170,000 *l.* per annum if and so long as the said Company shall upon the requisition of the Postmaster General cause to be performed two such voyages each way in every calendar month.

A sum after the rate of 184,166 *l.* per annum if and so long as the said Company shall upon the requisition of the Postmaster General cause to be performed two such voyages each way in every lunar month of four weeks.

And that the said payments shall be made in equal quarterly payments on the first day of April the first day of July the first day of October and the first day of January in each year and shall accrue due from day to day and the said payments shall be received by the said Company as full compensation for all costs and expenses which they may incur or be put unto by reason or on account of all and singular the services hereby contracted to be performed subject however to the abatement of any sums of money in respect of forfeitures which the said Company may have incurred or to the addition of any sums in respect of premiums as the case may be as herein provided.

And it is hereby further agreed and declared between and by the said parties to these presents :

30. That if at any time during the continuance of this Agreement or after the determination thereof any dispute shall arise between the parties hereto or their successors respectively concerning any breach or alleged breach by or on the part of the Company of this Agreement or the sufficiency of any such breach to justify the Postmaster General in putting an end to the same or concerning the amount of consideration to be paid to or allowed by the Company as the case may be for such altered services as hereinbefore in that behalf mentioned or concerning any of the covenants matters or things hereinbefore contained or in anywise relating thereto and notwithstanding the power herein contained to determine this agreement and any execution or attempted execution of such power such dispute shall be referred to two arbitrators one to be chosen from time to time by the Postmaster General and the other by the Company and if such arbitrators should at any time or times not agree in the matter or question referred to them then such question in difference shall be referred by them to an umpire to be chosen by such arbitrators before they proceed with the reference to them and the joint and concurrent award of the said arbitrators or the separate award of the said umpire when the said arbitrators cannot agree shall be binding and conclusive upon both parties.

31. That the whole postage of all mails conveyed in the vessels employed under this agreement shall belong to Her Majesty and shall be at the disposal of Her Majesty's Postmaster General.

32. That this Agreement shall commence on and from the first day of February 1866 and shall continue in force until one of the said parties hereto shall give to the other of them 24 calendar months' notice of his or their desire to determine the same and on the expiration of such notice this agreement shall determine accordingly without prejudice nevertheless to any right of action or other proceeding which shall then have accrued to either party for any breach thereof.

33. AND IT IS HEREBY FURTHER AGREED that in case the Company shall fail to commence the performance of the services herein agreed to be by them performed on the first day of February 1866 then and in such case the Company shall forfeit and pay unto Her Majesty her heirs and successors the sum of 100 *l.* and also the further sum of 100 *l.* for every successive period of 24 hours which shall elapse after the first day of February 1866 until the actual and *bonâ fide* commencement of the performance by the Company of the services herein agreed to be by them performed and further that in case the Company shall fail to have the said vessels to be used in the execution of this contract complete and ready for final survey on the 15th day of January 1866 the Company shall forfeit and pay unto Her Majesty her heirs and successors the sum of 10 *l.* for every successive day which shall elapse after the said 15th day of January 1866 until such vessel shall be so complete and ready for final survey as aforesaid: Provided always that the total amount of the penalties to be incurred by the said Company by reason of such failures as aforesaid respectively shall not exceed the sum of 25,000 *l.*

34. That the Company shall not assign underlet or dispose of this Agreement or any part thereof without the consent of the Postmaster General signified in writing under his hand

Disputes to be referred to arbitration.

All postage to be at the disposal of the Postmaster General.

Commencement and duration of contract.

Penalties for failing to commence service on 1st February 1866, and not having vessels ready for survey on the 15th January 1866.

Company not to assign, &c. contract.

hand or under the hand of the Secretary or one of the Assistant Secretaries of the Post Office and that in case of the same or any part thereof being assigned underlet or otherwise disposed of or of any great or habitual breach of this Agreement or of any covenant matter or thing herein contained on the part of the Company their officers agents or servants and whether there be or be not any penalty or sum of money payable by the Company for any breach it shall be lawful for the Postmaster General if he shall think fit (and notwithstanding there may or may not have been any former breach of this contract) by writing under his hand or under the hand of the Secretary or one of the Assistant Secretaries of the Post Office to determine this Agreement without any previous notice to the Company or their agents nor shall the Company be entitled to any compensation in respect of such determination.

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Postmaster General may determine contract on breach without notice.

35. That if on the determination of this Agreement any vessel or vessels should have started or should start with the mails in conformity with this Agreement such voyage or voyages shall be continued and performed and the mails be delivered and received during the same as if this Agreement had remained in force with regard to any such vessels and services and with respect to such vessels and services as last aforesaid this Agreement shall be considered as having terminated when such vessels and services shall have reached their port or place of destination and been performed.

On determination, voyages begun to be completed.

36. That all notices or directions which the Postmaster General his officers agents or others are hereby authorised to give to the Company their officers servants or agents other than any notice of termination of this contract may at the option of the Postmaster General his officers agents or others either be delivered to the master of any of the said vessels or other officer or agent of the Company in the charge or management of any vessel employed in the performance of this Agreement or left for the Company at their office or house of business in London or at their or any of their last known places of business or abode and any notices or directions so given or left shall be binding on the Company: Provided always that any notice of termination of this Contract shall be served on the Company their officers servants or agents at their office or last known office in London.

As to notices.

37. That the Lords Commissioners of the Admiralty for the time being shall at any time during the continuance of this Agreement in case of great public emergency have power to purchase all or any of the said vessels at a valuation or to charter the same exclusively for Her Majesty's service at a rate of hire to be mutually fixed and agreed on by the said Commissioners and the Company but if any difference should at any time or times arise as to the amount of valuation or hire so to be paid or as to the amount of damages consequent upon such purchase or hiring such difference shall be referred to two arbitrators or an umpire to be chosen respectively as aforesaid and that the said Commissioners in the case of hiring any such vessel shall return the same to the Company in the same state and condition as she was in at the time of any such hiring reasonable wear and tear excepted and if any difference should arise upon that point the same shall be settled in the same manner as the amount for the hiring is to be settled in case of difference.

Admiralty may purchase or charter vessels.

38. That in case of such purchase or hire the service hereby agreed to be performed shall be performed by other vessels of the Company if the Company can in due and proper time furnish them such other vessels as to construction machinery equipment officers and crew to be subject to the like approval as other vessels employed under this Agreement but in case the Company be unable to furnish such other vessels it shall be lawful for them to determine this Agreement from the date of such purchase or hire but the same shall be considered as in force until the completion of any voyages then already undertaken.

And Company to provide others if they can.

39. That in the event of the Company being allowed by the Postmaster General to continue to perform only a portion of the service there shall be paid to them such annual sum of money as shall be agreed upon by the Postmaster General and the Company and in case of their differing as to the amount such difference shall be settled by two arbitrators or an umpire to be chosen respectively as aforesaid.

If services reduced, reduced subsidy to be agreed on.

40. That any submission to arbitration in pursuance of this Agreement shall be made a rule of any of Her Majesty's Courts of Record pursuant to the Statute in that case made and provided on the application of either party.

Any reference to be made a rule of Court.

41. That in pursuance of the provisions contained in the Act of Parliament passed in the 22nd year of the reign of King George the Third intituled "An Act for restraining any person concerned in any Contract Commission or Agreement made for the public service from being elected or sitting and voting as a member of the House of Commons" no member of the House of Commons shall be admitted to any share or part of this Agreement or to any benefit to arise therefrom.

No Member of Parliament to be admitted to any interest in Contract.

42. That this Agreement shall not be binding until it has lain upon the table of the House of Commons for one month without disapproval unless it be previously approved by a resolution of the said House of Commons.

Contract to be laid on the Table of the House of Commons.

43. And for the due and faithful performance of all and singular the covenants conditions provisoes clauses articles and agreements herein-before contained and which on the part and behalf of the said Company their officers agents or servants are or ought

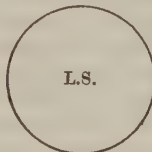
Bond Clause.

App. No. 24.

to be observed performed fulfilled and kept the said Company do hereby bind themselves and their successors unto Her Majesty the Queen in the sum of 25,000 *l.* sterling to be paid to Her Majesty her heirs and successors by way of stipulated or ascertained damages hereby agreed upon between the said Postmaster General and the said Company in case of the failure on the part of the Company in the execution of this Contract or any part thereof.

In witness whereof the said Edward John Lord Stanley of Alderley Her Majesty's Postmaster General hath hereunto set his hand and seal and the said Peninsular and Oriental Steam Navigation Company have caused their common seal to be hereunto affixed the day and year first above written.

Stanley of Alderley.



Signed sealed and delivered by the within named Edward John Lord Stanley of Alderley Her Majesty's Postmaster General in the presence of

J. L. Du Plat Taylor,
Private Secretary General Post Office.

The common seal of the within-named Peninsular and Oriental Steam Navigation Company was hereunto affixed in the presence of

P. D. Hadow,
Alex. Nairne,
Wm. H. Hall, } Directors.

C. W. Howell, Secretary.

Z. Brooke,
Solicitor's Department, General Post Office.

Appendix, No. 25.

PAPER handed in by Mr. *Frederick Hill*, 20 July 1866.

App. No. 25-

LETTER from Mr *F. Hill* to Mr. *Herman Merivale*, C.B., dated 24 May 1866.

Sir,
General Post Office,
24 May 1866.

REFERRING to your letter of the 5th instant, I am directed by the Postmaster General to state that, until the Parliamentary Committee now sitting on the subject of Postal and Telegraphic Communication with India has completed its deliberations and made its report, he thinks it would be inexpedient to take action in the matters to which your letter relates.

Meanwhile, however, his Lordship deems it desirable that some of the statements in the correspondence which your letter encloses should not pass unnoticed; and I am therefore instructed to make the following remarks:

In the letter dated 27th February last, from the Government of India, it is stated that while that Government are ready, in addition to a reasonable share of the cost of the service west of Suez, to defray the whole cost of the mail service between Suez and Bombay, they think that if this arrangement be attended with loss, it would hardly be desired by England that the whole of that loss should fall upon the Indian revenues, the interests of England and India being jointly concerned in this matter.

With regard to this statement I am to observe first, that Lord Stanley of Alderley entertains no doubt that exclusive even of the loss upon the China service, one half of which, as you are aware, under a decision long since arrived at by the Lords of the Treasury, India has to bear, there would, at the present rate of postage, be, for some time to come, a very considerable loss on the service of India proper; secondly, that his Lordship has never for a moment affirmed that India alone has an interest in the postal correspondence between that country and England; and lastly, that as any loss that may accrue will be chiefly attributable to the opposition of the Indian Government to even a temporary increase in the rate of postage, it seems to him not equitable that by that Government the loss shall be borne.

With reference to the last part of the 7th paragraph of the letter under consideration, I am directed to refer you to my letter of the 14th July 1865, wherein it was shown that, under present circumstances, no material saving would be effected by the discontinuance of the line to Calcutta, although Lord Stanley of Alderley is unable to say what would be the financial result, with the now nearly prospect of the completion of the railway between Bombay and Calcutta, of terminating the present contract with the Peninsular and Oriental Company, and throwing open the whole Indian service to competition.

In the letter of the 22nd February last from Mr. Riddell, Director General of the Post Office of India, paragraph 6, is the following passage: The line between Galle and Suez must be con-

tinued for the conveyance of the China and Australian mails; and if the Indian mails are no longer sent by that route, the cost of the Australian and China mail service will be increased by the sum heretofore paid by India; and it would appear from the tenor of Mr. Hill's letter, that this consideration has been the ground upon which all connected with India have been so long denied the advantage of a weekly mail to and from England, and even of four mails in the month."

Lord Stanley of Alderley is at a loss to imagine how Mr. Riddell could have formed so erroneous a conception, or on what expressions in my letters he bases his opinion; and he feels bound, in vindication of his department, to state that the delay which has arisen is not attributable to the British Post Office, but to the Government of India, and to the opposition that has been manifested either on the one hand to consent to increase the rate of postage, or, on the other, to make good the expected loss out of the Indian revenue.

On the point of delay I have to remind you that my letter of the 8th January 1863, speaking of the necessity of raising the postage, "in order to place the Indian packet service in a position in which more money could properly be expended upon it, and to admit of the line to Bombay being made weekly, when a good opportunity should present itself," received no answer till June 1865, (*i.e.*) after an interval of nearly two years and a half.

Mr. Riddell proceeds to observe in paragraph 7, "that the cost of the Mediterranean lines might be reduced, without inconvenience to the public, by a reduction in the number of mails sent *via* Southampton."

This statement also is erroneous, and Lord Stanley of Alderley cannot but feel some surprise that Mr. Riddell should venture to pronounce authoritatively on a matter on which his knowledge must necessarily be very imperfect.

By inquiry of the Directors of the Peninsular and Oriental Company it was ascertained, some time ago, that they could not consent to any abatement from their subsidy, although a reduction were made in the service between Southampton and Alexandria, or even if that service were wholly discontinued, any more than they could do so if a similar change were effected in regard to the service between Suez and Calcutta, seeing that neither alteration would enable them to withdraw any of their ships.

There are other statements in Mr. Riddell's letter, in which Lord Stanley cannot agree, but he thinks it unnecessary to pursue the subject further.

I am, &c.

(signed) *F. Hill*.

Herman Merivale, Esq., C.B.,

&c. &c. &c.,

India Office.

Appendix, No. 26.

App. No. 26.

PAPER handed in by Mr. *Bourdillon*, 20 July 1866.

LETTER from Mr. *Stansfeld*, M.P., to the Secretary, General Post Office, dated 12 June 1866.

Sir, India Office, 12 June 1866.
I AM directed by the Secretary of State for India in Council to acknowledge the receipt of Mr. Hill's letter dated the 24th ultimo, relating to the re-arrangement of the postal service between this country and India, which formed the subject of Mr. Merivale's letter of the 5th idem; and, in reply, to state, that his Lordship acquiesces in the intention expressed by the Postmaster General not to take any action in the matter in question till the Parliamentary Committee on Indian communications shall have brought its deliberations to a conclusion.

In the meantime, Earl de Grey would wish it to be understood that he continues to be of opinion

that the proposed increase in the rates of postage would be likely to have a very prejudicial effect on the intercourse between this country and India; and that, while his Lordship cannot but hope that the cost of the proposed weekly service with Bombay will ultimately be found considerably less than is anticipated by Her Majesty's Postmaster General, his Lordship still thinks that it would not be just that any additional expense which may be incurred on this account should be borne exclusively by the revenues of India.

I am, &c.
(signed) *J. Stansfeld*.

To the Secretary,
General Post Office.

Appendix, No. 27.

CONVENTION between Her Majesty and the Shah of *Persia* relative to TELEGRAPHIC
COMMUNICATION between *Europe* and *India*.

App. No. 27.

Signed, in the English and Persian Languages, at Tehran, 23 November 1865.

[Ratifications Exchanged at Tehran, 1 May 1866.]

As Her Majesty the Queen of the United Kingdom of Great Britain and Ireland, and His Majesty the King of all the Kingdoms of Persia, are desirous of regulating the telegraphic communication between Europe and India, and of placing this work on a sure and friendly basis, they have resolved that a Convention for that purpose shall be concluded; wherefore their Majesties have named as their Plenipotentiaries:—

Her Majesty the Queen of the United Kingdom of Great Britain and Ireland, his Excellency Charles Alison, Esquire, Companion of the Most Honourable Order of the Bath, Her Envoy Extraordinary and Minister Plenipotentiary at the Court of Persia;

And His Majesty the King of all the Kingdoms of Persia, his Excellency Mirza Saeed Khan, His Minister for Foreign Affairs, possessor of the Order of the Royal Portrait, adorned with diamonds, and of the blue cordon, and bearer of the pearl tassel and rod adorned with diamonds, possessor of the Order of First Serteeb with its special cordons, and bearer of the Order of St. Ann adorned with diamonds of the first class, and of the Order of the Medjidie of the first class, and of the First Order of the Iron Crown, and the First Order of Leopold, and the First Order of Danebrog, and the First Order of St. Maurice and Lazare, and the First Order of the Saviour of Greece, and the Order of the Polar Star of Sweden, and the Second Order of the Legion of Honour;

And the aforesaid distinguished representatives, after meeting in the capital of Tehran, and perusing and exchanging their letters of full power, and finding them in due order, have concluded the following Articles:—

Article I.

In order to improve the telegraphic communication between Europe and India, the Persian Government agrees to attach another wire to the poles now standing from Bushire to Khanikin, and to bring it into working order as soon as possible. The wire to be used solely for international messages sent in European languages.

Article II.

In order that the second wire may be attached in a complete and effective manner, the Persian Government also agrees that it shall be done under the direction and supervision of an English engineer officer and staff. And the Persian Go-

vernment will use its best endeavours to collect the necessary materials, and lay down the wire with all expedition.

Article III.

The British Government agrees to procure for the Persian Government, at a reasonable price, and with the cognizance of a Persian Commissioner, all the wire, insulators, Morse instruments, &c., that may be requisite for this work, inclusive of 200 iron posts for the marshy tract of Bushire, and to deliver them over to the Government Commissioners at any seaport or frontier town of Persia that may be suitable, receiving payment in five years in five instalments.

Article IV.

The Persian Government, moreover, agrees that an English telegraph officer, with the necessary staff, not exceeding fifty (50) in number, exclusive of families, shall be engaged from the opening of telegraphic communication through the new wire, for five (5) years, in organising the Persian line of telegraph and giving instruction in telegraphy. And the British Government agrees that the English officer and his staff shall, at the expiration of the prescribed period, make over the said line to the Persian Government and cease connection with the Persian telegraph.

Article V.

The conditions under which the English officer shall exercise control over the second wire, during the prescribed period, are stated in the following rules:—

1. His Royal Highness the Itizad-es-Sultaneh, Minister of Science, or any other person who by the Shah's order may be appointed in his place, is to be considered the head and absolute chief of all the Persian Government telegraphs.

2. Any order which His Royal Highness, or such other person in his place, may issue concerning the protection of the line, its working, and the Persians employed on it, shall be given through and with the approval of the English telegraph officer.

3. For the protection of the line, the whole distance from the Turkish frontier to Bushire shall

App. No. 27. be divided from station to station into six sections, as follows:—

From the Turkish frontier to Hamadan.
 From Hamadan to Tehran.
 From Tehran to Kashan.
 From Kashan to Ispahan.
 From Ispahan to Shiraz.
 From Shiraz to Bushire.

To each of these divisions the Itizad-es-Sultaneh shall appoint a Persian officer, who will be responsible to His Royal Highness for the protection of the line situated within his limits.

To enable the said Persian officer or Yaver of each division to carry out his duties efficiently, a certain number of horsemen shall be stationed under his orders along the line. The Yaver will of course accept any suggestions which the English telegraph officer may give with reference to his charge, due regard being had to the customs of Persia and her power of carrying out such suggestions.

4. The organisation of officers and instruction of *employés* shall be exclusively in the charge of the English superintending officers, who will be responsible for the working of the line in these respects; and the Persian signallers shall be ordered to obey implicitly the instructions which the English officers may give in the performance of their duties.

5. In case of insubordination or misconduct on the part of the Persian signallers, His Royal Highness the Itizad-es-Sultaneh engages to use his best endeavours in lawfully supporting the authority of the English superintending officer, exercised under the last rule. On the other hand the English officer engages that the bounds of that authority shall in no way be exceeded.

6. The English officer shall have nothing whatever to do with receipts of money. A Mirza will be appointed at each station, who will be directly responsible for the accounts to the Itizad-es-Sultaneh. But the English superintending officer shall render to His Royal Highness, or any person who may be appointed by the Persian Government, such account of the telegrams dispatched under his authority as may be sufficient for full information.

These rules, however general in some sense, are understood to have special application to the second wire.

Article VI.

In filling up vacancies which may occur among the signallers employed under Article IV, the English telegraph officer shall give the preference to natives of Persia, provided they be qualified in his estimation by knowledge of the English language, and other attainments necessary for this service, to perform the duties required.

Article VII.

As the telegraph offices of these two wires ought to be distinct, the Persian Government shall build a new office adjoining the existing one wherever there are not separate rooms.

Article VIII.

If any injury befall the second wire, or delay occur through press of traffic, the first wire,

which is specially used for internal communication in Persia, shall give assistance to the second wire, and *vice versa*.

Article IX.

For every message of twenty words or less from Khanikin to Bushire, or *vice versa*, one toman five kirans and eight shabis in Persian money, or fourteen shillings in English money, shall be charged, with proportionate rates for the intervening towns.

The Persian Government accepts the Tariff laid down in the last Convention between Turkey and England, so far as regards the rates of messages sent by the two Governments from Bushire to India, and from Khanikin to Constantinople or Europe.

Article X.

The yearly receipts will be credited to the Persian Treasury; but should they reach a higher sum than thirty thousand (30,000) toman, the surplus will be made over to the officers of the English Government for the cost of their establishment.

Article XI.

All Indian messages, at whatever part of the line or from whatever place received, shall be given over to the second wire, and the accounts regularly kept.

Article XII.

Should the traffic so continuously increase as to demand more than in one day the fair day's work on the second wire, the excess of telegrams shall be handed over for dispatch to the first wire, the money received on them being separately credited to the Persian Government. The adjustment of this matter shall rest with the Itizad-es-Sultaneh and the English superintending officer. This Article is quite irrespective of the provision for mutual assistance in the event of a slight and temporary delay.

Article XIII.

The cost of all other than Indian or submarine cable messages shall be separately credited to the Persian Treasury, although conveyed by the second wire.

Article XIV.

The relative values of coin shall be calculated for purposes of account at the following rates:—

One pound sterling = 25 francs = 22 kirans.
 One shilling = 1 franc 25 centimes = 1 kiran 2 shabis.
 One penny = 10 centimes = 2 shabis.

As a rule, accounts shall be kept in English and payments made in Tehran in Persian currency.

Article XV.

The telegraph accounts shall be made up by the English superintending officer monthly and sent to Constantinople, where, by comparison with the Cable and Turkish accounts, they will be checked by the British Commissioner appointed for that purpose. On the return to Tehran of the audited accounts from Constantinople, the amount

80

84

88

92

96

100

Appendix N^o 29.

TELEGRAPH MAP

O F

INDIA

1866.

SCALE, 128 MILES = 1 INCH.



Prepared from information furnished by the Telegraph Department.



REFERENCES.

Telegraph Lines thus —
Ditto Ditto under construction — — — —
Ditto Stations undotted thus •
Ditto Ditto Occasional •

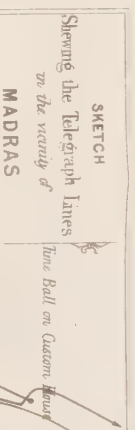
Telegraph Lines thus —

Ditto Ditto under construction — — — —

Ditto Stations undotted thus •

Ditto Ditto Occasional •

Mutree



Sketch

Showing the Telegraph Lines

in the vicinity of

MADRAS

MADRAS Office

Port

Observatory

Fort

Post

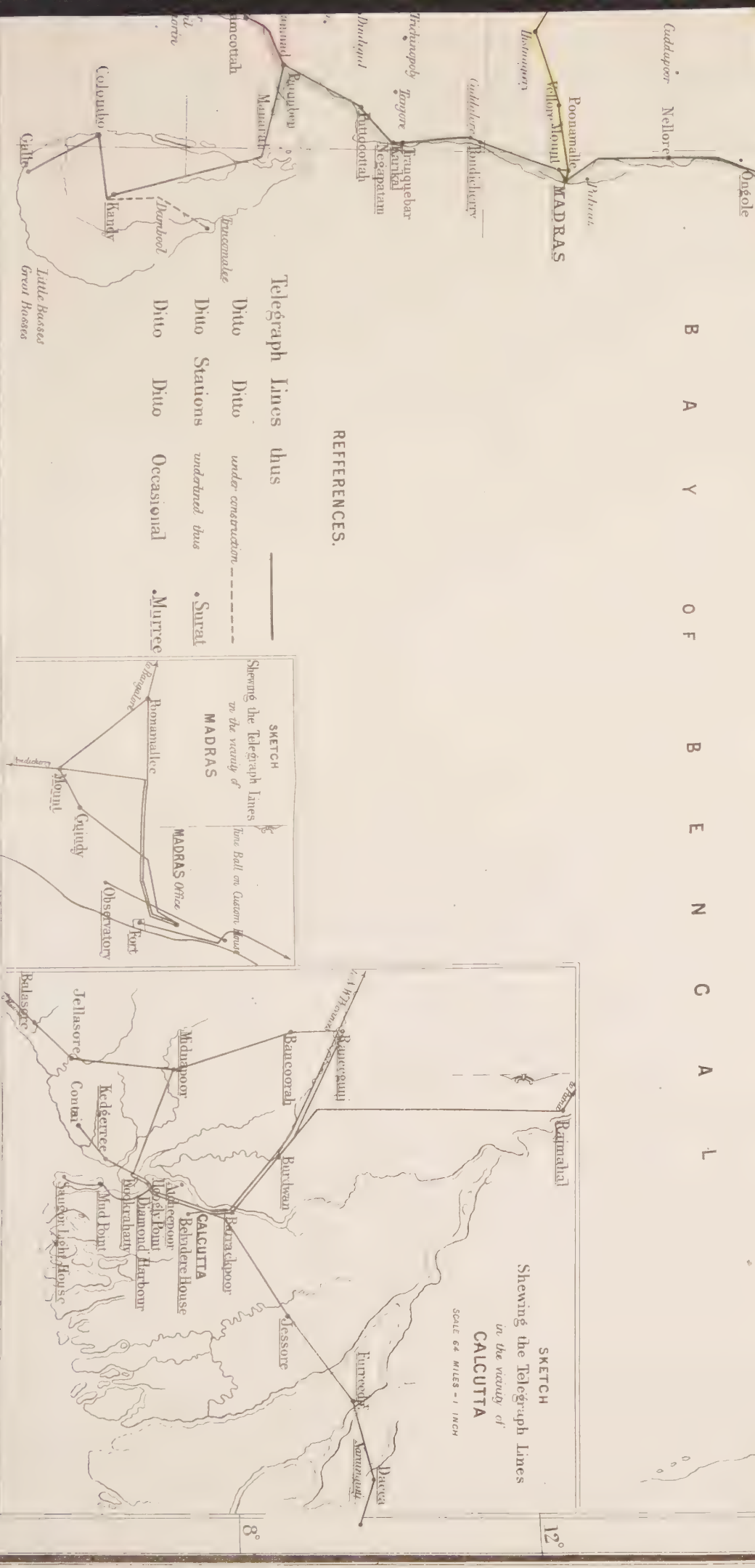
Sketch

Showing the Telegraph Lines

in the vicinity of

CALCUTTA

SCALE 64 MILES = 1 INCH



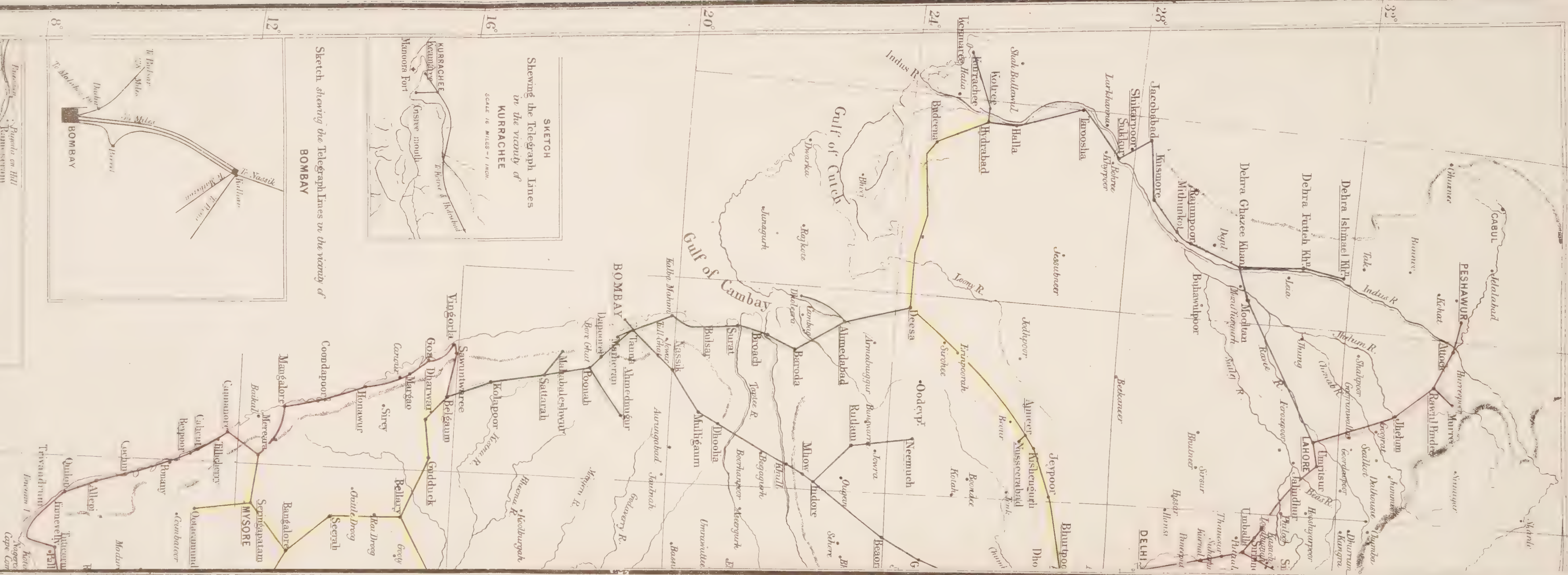
80

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96





Appendix, Nº 28.

GENERAL MAP OF TELEGRAPH LINES
BETWEEN ENGLAND, INDIA, CHINA & AUSTRALIA.
1866.

REFERENCE		
INDIA CHINA AND AUSTRALIA TELEGRAPH		
Submarine Cables.	Proposed Line	Depth.
Rangoon to Singapore	Knots	Fathoms
Singapore to Batavia	1160	15 to 50
E. Java to Adam Bay	560	15 to 30
(Nth Australia)	1283	40 to 100
Singapore to Shanghai	2945	20 to 112
and Japan		
TOTAL DISTANCE	5,968	

N.B. 590 Knots between
Marsassar & Timor
not Sounded.

Lines now working
in course of construction
proposed
Proposed alternative Lines
Telegraph Station

due to the Persian Government will be certified by the English officer, and speedily paid every six months, as stated in the last article. The above account shall always be open to the inspection of the telegraph agent of the Persian Government at Constantinople, or any person recognised by the Persian Minister at the Ottoman Court, for the settlement of accounts of international traffic on the Persian-Turkish lines.

Article XVI.

The telegraphic regulations drawn up at Paris on the thirteenth of April, Anno Domini one thousand eight hundred and sixty-five, shall be carried out under the superintendence of the Persian Government, so far as not opposed to the terms of the present Convention or the institutions of Persia.

Article XVII.

Any disagreement arising between the telegraphic *employés* of the two Governments shall be referred to their Excellencies the Persian Minister for Foreign Affairs and the British Minister at Tehran, in order that, after necessary investigation, a just decision may be pronounced.

Article XVIII.

This Convention shall take effect from the opening of correspondence on the second wire, and remain in force for five (5) years from the day that a telegram is first dispatched thereby. At the expiration of the five years it shall be null and void. If at any time within the term appointed the capabilities of Persian telegraphers for their work shall be proved to the satisfaction of the chief of the Persian telegraphs and the English telegraph officer, the full period shall be curtailed, and the line made over altogether to the Persian Government.

Article XIX.

The present Convention shall be ratified, and the ratifications exchanged at Tehran within five months, or sooner if practicable.

Done at Tehran, on the twenty-third day of November, Anno Domini one thousand eight hundred and sixty-five.

C. Alison.
(L.S.)

Meerza Saeed Khan.
(L.S.)

I N D E X

TO THE

R E P O R T

FROM THE

S E L E C T C O M M I T T E E

ON

EAST INDIA COMMUNICATIONS.

*Ordered, by The House of Commons, to be Printed,
20 July 1866.*

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[*N.B.*—In this Index the Figures following the Names of the Witnesses refer to the Questions in the Evidence; those following *App.* to the Pages in the Appendix; and the Numerals following *Rep.* to the Pages in the Report.]

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Requirement of vessels of special construction if they were to run all the way from Suez to Bombay, without calling at Aden for coals, *Howell* 1274-1280—Decided objection to any scheme of postal communication involving a junction of lines at so inconvenient a place as Aden, *ib.* 1440, 1441—Necessity of the vessels carrying a much larger quantity of coal and a much smaller cargo if they are not to stop at Aden; difficulty on this score, *Samuda* 2951-2955.

Correspondence in 1861 and 1862 with reference to tenders for a postal service twice a month between Aden and Bombay, *App.* 244 *et seq.*—Tender submitted by the British and Eastern Steam Navigation Company in October 1862 for the proposed service, *ib.* 262-264.

Communication from the Peninsular and Oriental Company dated 15 October 1862, upon the question of tendering for a bi-monthly service from Aden to Bombay, *App.* 267-270.

Return showing the length of the stoppage at Aden during the years 1864 and 1865; *App.* 564.

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1. *Postal Service.*
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1. *Postal Service:*

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"*Behar*," *The*. Statement of the tonnage and horse power of this vessel of the Peninsular and Oriental Company, *App.* 569.

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Letter from Mr. Blissett to the Director General of Telegraphs, dated Bangalore, 9th September 1864, submitting suggestions for the improvement of the constitution of the department, *App.* 497, 498.

BOMBAY:

I. *Present Postal Service between Suez and Bombay:*

1. Cost of the Service.
2. Way in which performed.

II. *Question of a Weekly Mail to and from India, viâ Bombay:*

1. Evidence as to the importance of a Weekly Mail to Bombay.
2. Proposition made by Mr. Knight, in 1865, for an additional Fortnightly Service between Bombay and Suez.
3. Proposition by the Bombay and Bengal Steam Ship Company, in 1866, for an additional Fortnightly Service.
4. Plan submitted some few years since by Mr. Rennie.
5. Explanations on the part of the Peninsular and Oriental Company in connection with the proposed Service.
6. Increased Cost of a Weekly Mail to Bombay, as compared with the existing arrangements.
7. Suggestions by Mr. Samuda, in regard to the performance of a Weekly Service.
8. Question of an increase of Postage as a condition of the establishment of a Weekly Mail.
9. Correspondence and Papers explanatory of the part taken in the matter by the Post Office, the Indian Government, the India Office, and the Treasury.
10. Conclusions and Recommendations of the Committee.

III. *Telegraphic Communication:*

1. Kurrachee and Bombay.
2. London and Bombay.
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I. *Present Postal Service between Suez and Bombay:*

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2. Proposition made by Mr. Knight in 1865 for an additional Fortnightly Service between Bombay and Suez:

Explanation in connection with a proposition made by witness to the Post Office in March 1865, upon the subject of a fortnightly mail service between Bombay and Suez, by an independent Company in India, for the sake of the ocean postage, *Knight* 466, 467—Further statement as to competent parties being fully prepared to undertake a fortnightly service from Bombay to Suez, in return for the ocean postage; that is, at the present rate of speed, *ib.* 2314-2316, 2324, 2325, 2338-2340, 2359-2372, 2437-2440, 2485, 2486.

3. Proposition by the Bombay and Bengal Steam Ship Company, in 1866, for an additional Fortnightly Service:

Information relative to an offer by the Bombay and Bengal Company to perform a fortnightly service from Suez to Bombay for 24,000*l.* a year, *Hill* 281-293.

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II. *Question of a Weekly Mail to and from India, viâ Bombay*—continued.

4. Plan submitted some few Years since by Mr. Rennie :

Explanation of a plan submitted by witness to Sir Charles Trevelyan, when Finance Minister in India, for greatly expediting the service between England and India, and for a weekly service between Suez and Bombay, *Rennie* 388-399.

5. Explanations on the part of the Peninsular and Oriental Company in connection with the proposed Service :

Application made to witness's Company by the Post Office upon the question of a weekly service to India in lieu of four services per month, *Howell* 1259, 1260—Offer by the Company to undertake a weekly service, or fifty-two voyages instead of forty-eight for an addition of one-twelfth to the subsidy, *ib.* 1261, 1262.

Due consideration given by the Company to the question of a weekly mail to Bombay, the fortnightly mail to Calcutta and Madras being dispensed with; obstacles to this arrangement, *Howell* 1263-1278—Willingness of the Company further to consider terms for the establishment of a weekly mail to Bombay, *ib.* 1271.

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Objections urged by Mr. Ritchie on the part of the Peninsular and Oriental Company in December 1860, against the proposal for a weekly mail to Bombay, to embrace also Calcutta and Madras by means of a weekly service overland from Bombay, *App.* 234-236.

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7. Suggestions by Mr. Samuda in regard to the Performance of a Weekly Service :

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Communication from the Government of India to the Secretary of State for India, dated 31st August 1860, in support of a letter from the Director General of the Post Office in India, in favour of a weekly mail to Bombay, and of the discontinuance of the service, *via* Galle, to Madras and Calcutta, *App.* 231, 232.

Letter from the Director General of the Indian Post Office, dated 24th April 1860, explanatory of his views in support of the establishment of a weekly mail, the mail to Calcutta and Madras being at the same time discontinued, *App.* 232, 233.

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Further statement by Mr. Riddell dated 19th April 1861 in support of the proposition for a weekly mail to Bombay and thence overland to Madras and Calcutta, *App.* 243, 244.

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Further communication from the Director General of the Post Office of India, dated 19th February 1866, relative to the expediency of the immediate establishment of a weekly service between Suez and Bombay, *App.* 600-602—Conclusion arrived at in Mr. Riddell's letter of 19th February 1866 that there will be no increase of expense provided the service between Suez and India is exclusively confined to Bombay, *ib.* 600, 601.

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Communication from the India Office to the Post Office, dated 5th May 1866, in which it is further stated that Lord de Grey is not prepared to sanction at the sole charge of India the establishment of the additional steamers required between Suez and Bombay for a weekly service, *App.* 602.

Letter from the Bombay Government, dated 27th January 1866, strongly recommending that the tender of Messrs. Stearns, Hobart & Co. be at once accepted provisionally for a year, *App.* 603.

Note by the Director General of Post Offices in India, dated 26th January 1866, strongly advocating the immediate acceptance of the tender of Messrs. Stearn & Hobart on the part of the Bombay and Bengal Company, *App.* 605.

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Bombay, Baroda, and Central Indian Railway. Returns showing the expenditure of the company in India and in England down to 31st December 1864, in respect of the electric telegraph, the receipts for messages, the expenses for working and maintenance, and the number of miles of telegraph lines open in 1863 and 1864, *App.* 525, 615.

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Communication from the Bombay Chamber of Commerce to the Government of India, dated 25th February 1861, upon the subject of the falsification of opium messages sent by telegraph, and the expediency of amended regulations in connection with the telegraph system, *App.* 413.

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C.

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2. *Telegraphic Communication.*

1. *Postal Communication:*

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1. *Postal Service.*
2. *Telegraphic Communication.*

1. *Postal Service :*

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COAL AND COALING ARRANGEMENTS (MAIL PACKETS):

1. *As to the Cost and the Supply of Coal at Aden, Suez, and Bombay.*
2. *As to the Consumption with reference to the Speed.*
3. *As to Practice of Coaling at Aden.*

1. *As to the Cost and the Supply of Coal at Aden, Suez, and Bombay:*

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1. *Gross and Net Cost of the present Mail Services to the East.*
2. *Calculations as to the Additional Cost of a Weekly Mail to Bombay.*

1. *Gross and Net Cost of the present Mail Services to the East:*

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Government Aid (Telegraph to China and Australia). Question still undecided by the Telegraph to India Company whether they shall apply to Government for any pecuniary aid or subsidy in connection with the scheme for one unbroken line of telegraph to India, China, and Australia, under one administration, *Sir M. Stephenson* 645-647.

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Circumstance of the British Government not being at any cost whatever in respect of the line to India *via* Constantinople and the Persian Gulf, *Gisborne* 3341—Statement as to the British Government or the India Office not being called upon for any aid to a line from Singapore to Java, or from Java to Australia, if they would only contribute to a line from Rangoon to Singapore, *ib.* 3347-3349.

Government Officials (Passengers). Heavy burden upon the poorer servants of the Indian Government through the high rates charged between Bombay and Suez, *Knight* 466. 474-481.

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Deduction of 15,000*l.* from the subsidy for the India and China mail service on account of the abandonment of reduced rates for Government passengers, *App.* 538.

Government Telegraphs (India.) See *Telegraphic Communication*, II. 1.

Government Transports. Probability of many passengers being withdrawn from the Peninsular and Oriental Company's vessels by the proposed establishment of Government transports between Suez and Bombay, *Howell* 1473-1480—Improbability of greater speed than ten knots an hour in the passage between Suez and Bombay in Government troopships, *ib.* 1536-1541—Probability of the docking facilities of the company being resorted to for the Government troopships, *ib.* 1546-1548—Impression as to the insufficiency of the Government dock accommodation for the proposed troopships, *ib.* 1562-1566.

Great Indian Peninsula Railway. Explanation as to the probable time of completion of various portions of the Company's system now in course of construction, *Taylor* 22-33—Character and effect of the Government control over the management of the Great Indian Peninsula Railway adverted to in connection with their administration of the telegraph, *Thornton* 2820, 2821.

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Returns showing the expenditure of the company in India and in England down to 31 December 1864, in respect of the electric telegraph, the receipts for messages, the expenses for working and maintenance, and the number of miles of telegraph lines open, in 1863 and 1864, *App.* 530. 615.

Proceedings in the Public Works Department in India in September and October 1865, with reference to the extension of the railway to Nagpore, Jubbulpore, &c., in connection with the conveyance of the mails overland from Bombay to Calcutta, &c. *App.* 606-611.

See also *Railway Communication (India).* *Railway Telegraphs (India).*

Great Southern of India Railway. Statement of expenditure of the company down to 31 December 1864, in respect of the electric telegraph, receipts for messages, the expenses for working and maintenance, and the number of miles of telegraph lines open in 1863 and 1864, *App.* 527. 615.

Green, John. (Analysis of his Evidence.)—Represents the firm of Kalli Brothers, having extensive transactions with India, 1145, 1146—Frequent use of the telegraph to India by witness's firm; testimony to the great importance of this means of communication, 1147-1154. 1168-1172—Illustrations of the very unsatisfactory and inaccurate performance of the telegraph service; suspicion of fraud in transmitting the messages in India

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Greener, John Henry. (Analysis of his Evidence.)—Has been for five years engaged under Colonel Kemball in the construction and inspection of the telegraphic line from Bagdad to the head of the Persian Gulf, 1852-1859—The line was in very good condition and was working well when witness left, about five months ago, 1860—Since its completion the line has not been interfered with by the Arabs, but during construction was frequently injured by them, 1860. 1863—The line has been exceedingly well constructed, 1861, 1862.

Separate offices at Fao for the Turkish line and the Indo-European line, 1864-1866—Construction of the line between Constantinople and Bagdad under English superintendence, 1867-1869—Route of the line between Constantinople and Bagdad, and between Bagdad and Fao, at the head of the Persian Gulf, 1870—Good construction of the line between Constantinople and Bagdad, so that if properly managed it should work as well as any other line, 1871-1873. 1897—Obstruction in some parts of the line in Asia Minor in winter, when there are heavy falls of snow; improvement in this respect if the line did not go direct through the valley, 1874, 1875. 1942-1946.

The line from Constantinople through to Fao is practically worked from Constantinople, as being the head quarter, 1876-1878—Imperfect working of the line attributed chiefly to the neglect of the Turkish line men, more especially when the insulators get broken, 1879-1882—Constant error in the transmission of messages through the clerks at the stations being mostly Armenians, few of whom understand English; there should in fact be two clerks at each station competent to read English, 1883-1886.

Repetition of the message several times between Constantinople and Fao, whereas under proper management a message might be sent to Fao in two hours, 1887, 1888—Indifference of the officials in regard to the adoption of improvements, 1889, 1890—Occasional instances of messages being kept for days without being forwarded, 1891, 1892—Probability of the later messages being sometimes the first forwarded, when there is a large arrear to be overhaken, 1893, 1894.

Satisfactory working of the line through Turkey, if there were some good English signallers and inspectors, together with some Turkish sub-inspectors, 1895-1901—Entire inadequacy of the present inspection of the line, 1896. 1936—Very inaccurate manner in which messages are transmitted from the interior of India, 1902, 1903—Accurate and expeditious working of the Indo-European line, that is, from Fao to Kurrachee, 1904-1906—Information relative to the line recently made from Diarbekir to Alexandria; its value if put into proper working order, 1907-1914.

Expediency of some pressure upon the Turkish Government in order that the terms of the convention with this country as to the working of the telegraph lines may be properly fulfilled, 1915-1919—Impression that the line from Constantinople to Belgrade is working very well, 1920, 1921—Messages should reach Kurrachee from Constantinople in three or four hours, 1922-1924—Facility of always working through from Constantinople to Bagdad, if there were one wire always available, with the insulation properly kept up, 1925-1934—Insufficiency of the maintenance arrangements on the Turkish lines further adverted to, 1935-1937.

Delays through there not being a regular system of change of clerks, as there is on the Persian Gulf line, 1938-1941—Advantage of the route by the Euphrates over that by the Tigris: less danger of interruption from the Arabs on the former route, 1947-428—L.

Greener, John Henry. (Analysis of his Evidence)—continued.

1952. 1959-1963. 1983-2001—Improbability of Arab interference or injury so long as the present Sheik of Montefidje is in power, 1951, 1952. 1964. 1988-2000—Satisfactory working of the line from Bagdad to Teheran and Bushire, there being English signallers right through, 1953-1955—Reference to a statement by Major Champain as to the very bad working of the line from Teheran through Russia, 1956—Very bad condition of the line between Kurrachee and Bombay, when witness saw it three years ago, 1957. 1958.

Advantage of the alternative route by way of Persia to the Persian Gulf line at Bushire, 1963—Circumstance of the Turks having put up a wire from Diarbekir to Scutari, but without insulators, so that it would not work, 1964—Advantage if there were stronger insulators on the line through Asia Minor, as recommended by witness in his report to Colonel Kemball, 1965-1970—Doubt whether Government messages from this country are given priority over private messages, 1971-1974.

With regard to the liability of certain parts of the line through Asia Minor to obstruction from snow, &c., there is no doubt but the line from Diarbekir to Alexandria through Syria, is very important as an alternative line in winter, if it were properly managed, 1975-1979—Very good working order of the line between Diarbekir and Mosul, 1980-1982—Further statement as to the convention not having been carried out in regard to the appointment of signallers conversant with English; prospect of this being remedied in time, 2002-2011.

Advantage of the Teheran line as an alternative route; arrangements as to the proportion of messages to be sent by this line, 2011-2014—Numerous messages sometimes passing daily through Bagdad, the offices being supposed to be open day and night, 2015, 2016—Probable explanation with reference to a certain message from Constantinople to Kurrachee, the acknowledgment of which was said to have been received back at Constantinople in three minutes, 2017-2024.

Grimston, The Hon. Robert. (Analysis of his Evidence.)—Is Chairman of the Electric and International Telegraph Company, 491—Description of the route or routes by which telegraphic messages received by the company are forwarded to India, 492-502—Preference given to the Frankfort route over the Berlin route, there being direct wires to each of those places, 493-496—Facility of speaking direct to Constantinople, if the foreign governments were so minded, 503-505—Endeavours made by witness's company to obtain increased facilities abroad for working the system to India, but without effect, 506-510.

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Hill, Frederick. (Analysis of his Evidence.)—Assistant Secretary to the Post Office; produces various documents and copies of correspondence upon the subject before the Committee, 1-6.

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[Second Examination.]—Delivers in a paper showing that the present loss on the Indian postal service is about 48,000*l.* a year, 43, 44—Explanation of the mode of calculation of the actual amount of the Indian mails and of the receipts, 45–52—Practice of charging postage upon the Government letters and despatches between England and India, it having hitherto been customary to affix stamps upon these in the usual way, 53–58. 61—Heavier postage upon letters *viâ* Marseilles than by way of Southampton, 59, 60.

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Homeward Mails. Return showing the days of departure and arrival of the mail packets on the homeward route from India in the years 1864 and 1865, *App.* 215. 217—Also the total number of voyages before time and the number behind time, *ib.* 217.

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Howell, Charles Wellington. (Analysis of his Evidence.)—Is secretary to the Peninsular and Oriental Steam Navigation Company, 1233—The company has the whole of the contracts for conveying the mails between this country and the East, 1234—There are now sixty-six vessels in the employment of the company; aggregate tonnage and horse power of these, 1235, 1236—Contract of February last adverted to as having been entered into chiefly with reference to the dispensing with certain surveys; the other contracts are however recited in this, 1237, 1238.

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1293-1295—Requirement upon the company to perform the voyage between Suez and Bombay in 312 hours, or at the rate of nine and a-half knots an hour, 1242-1247—Allowance of twenty-four days and sixteen hours for the whole distance from London to Bombay, 1245-1250—System of premiums and penalties upon which the whole of the services are now conducted, 1247, 1248. 1251, 1252. 1293-1295.

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ITALIAN ROUTE:

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1. *Postal Communication:*

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Return of messages received from Madras by the Electric and International Telegraph Company in March, and from the 1st to the 16th of April 1866, showing the route by which conveyed, and the time taken in transmission to London, *App.* 540-555.

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2. *Explanations on the Part of the Company in Defence of the Rates of Passage Money.*
3. *Question of Second-Class Passengers; Complaints and Explanations on this Point.*
4. *Complaints and Explanations in regard to the System of Supply of Wines and Spirits.*
5. *Total Number of First-Class Passengers in 1865.*
6. *Effect of a Weekly Mail to Bombay with reference to the Passenger Traffic.*

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Natural astonishment and dissatisfaction to be caused in Bombay, when the news arrives of a further contract or agreement having been entered into by the Post Office, in February, by which there is no adequate guarantee for a proper speed; witness, however, has not seen this agreement, *Knight* 2464–2484.

Time tables of the India, China, Australia, and Mauritius services for the year 1864, *App.* 218–221—Also for the year 1865, *ib.* 222–225.

Contract or agreement of 27th February 1866, between the Post Office and the company, making certain alterations in the contracts of 1st January 1853 and 7th July 1854, and in the contracts of 1861 and of 17th November 1865, in regard to penalties, &c., *App.* 227–231.

Copy of contract dated 17th November 1865, between the Post Office and the Peninsular and Oriental Company, for the conveyance of the mails between Point de Galle and Sydney, *via* King George's Sound and Melbourne, *App.* 645–652.

Review by the Committee of the existing contracts between Government and the Peninsular and Oriental Company, *Rep.* iv., v.

2. *As to the Amount of Subsidies paid to the Company:*

The company receive an average of 4 s. 5 $\frac{1}{2}$ d. per mile on the whole of the India and China services, *Howell* 1258—Great difficulty in showing the precise cost of fragmentary portions of the services performed by the company, *Chetwynd* 1843—Circumstance of the total subsidies to the company reaching an aggregate of 400,000 l., or 20 per cent. upon the paid-up capital, *Knight* 2312, 2313—Witness is satisfied that too much is paid for the service performed by the company, *ib.* 2322, 2323—Very lucrative business in the Bombay line without any subsidy, *ib.*—Total of 349,000 l. as the subsidy of the company, instead of 400,000 l., as stated by Mr. Knight, *Howell* 3024.

Statement by Mr. Chetwynd that the total sum now paid to the company for the conveyance of mails between this country and India and China (including the conveyance of the Australian mails between this country and Point de Galle) is 230,125 l., *App.* 211—Estimate that the whole cost of the Indian portion of the mail packet service is 153,580 l. per annum, and that of the China portion 66,594 l. per annum, *ib.* 211, 212. 538.

Return of the rate of charges and deductions, and amount payable for the year 1865, under the several contracts with the company, *App.* 226.

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3. *Particulars relative to the Steamers employed, and their Cost:*

Information as to the number of steamers belonging to the company, their tonnage, and horse-power, *Howell* 1235, 1236. 1446—Increased expense of the steam boats in about the same ratio as the tonnage, *ib.* 1493, 1494—Average of 332,711 l. a year for the last five years as the expenditure of the company on repairs and renewals of their steam ships on the eastern side of Suez, *ib.* 1542–1544.

Large establishments and docking facilities of the company at Bombay, Calcutta, and Hong Kong, where repairs and renewals are constantly going on, *Howell* 1544–1556—Immense heat in the engine room, so that there is a large per-centage of engineers and firemen on the sick list, *ib.* 1577–1579—More roomy cabins in the company's vessels than in the Cunard vessels, the latter vessels being in fact fitted up in a manner quite unsuitable

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3. *Particulars relative to the Steamers employed, and their Cost*—continued.

unsuitable for the Indian service, *Howell* 1580–1583—Purchase or construction by the company of twenty-eight ships since 1859 all of the first class, *ib.* 1589, 1590.

List of new ships added to the fleet of the company since January 1859, showing in each case the tonnage and horse power; total of about 2,144,000 *l.* as the cost of these vessels, *App.* 569.

4. *Way in which the several Services have been performed:*

Conclusion that upon the whole the Indian mail service has been performed with creditable regularity, *Hill* 164–182—Doubt as to the expediency of at once giving notice to terminate the Indian contract, *ib.* 230–234. 336, 337—Great forbearance and liberality evinced by the company, *ib.* 233. 237.

Frequent complaints in Calcutta as to the manner in which the service is performed by the company, *Rennie* 405—Due performance of the contract service by the company, the contract itself being however an improper one, *ib.* 455.

General and profound dissatisfaction in India on account of the service being neither so rapid nor efficient as it should be, *Knight* 462–465—Slight importance attached to the views expressed by Mr. Hill as to the satisfactory performance of the contract generally, *ib.* 2505–2508.

Satisfaction on the whole of the mercantile community in India, with the mode in which the postal service has been performed by the Peninsular and Oriental Company, *Nelson* 822—Satisfactory manner in which the postal service of the Peninsular and Oriental Company is conducted, *Crake* 936.

Great use to the company of the telegraphic communication with India and the East; illustration of this, *Howell* 1442–1445—Circumstance of the arrival of each mail from China &c., involving the performance of no less a distance than 17,598 miles, *vid* Marseilles, *ib.* 1445—Employment of eight different steamers in bringing the heavy portion of mails to Southampton, *ib.*—Conclusion as to the great consideration necessary before the service is in any way disjointed, *ib.*

As to the Australian service, there is reason on the whole to be proud of the manner in which it is performed by the Peninsular and Oriental Company, *Sir C. Nicholson*, 3257.

Return showing the actual days of departure and arrival of the mail packets of the company employed in the conveyance of the Indian Mails, in the years 1864 and 1865, *App.* 214–217—Summary of the foregoing, showing the number of voyages before time and the number behind time, *ib.* 216, 217.

Statement of the total distance run on each service in 1865, and the average speed per hour, *App.* 226.

Mileage table of the services performed by the company under their India and China contracts during the year 1865, *App.* 565.

Conclusion of the Committee that the services under the several contracts have been well performed, whilst no mail entrusted to the company has ever been lost, *Rep.* v.

5. *Practice in regard to Penalties and Premiums:*

Necessity, with reference to penalties and premiums, of maintaining naval agents on board the contract mail packets, *Hill* 101–124—Explanation as to an alteration in February last, in the system of assessment of penalties with reference to speed, *ib.* 162, 163—New system of premiums and penalties, upon which the whole of the services are now conducted, *Howell* 1247, 1248, 1251, 1252. 1293–1295.

Noticeable feature of the old contracts, that there is no provision for penalties, *Knight* 2283–2286—Recent date of the arrangement by which time tables from port to port have been substituted for a certain rate of speed per hour, under a system of penalties and premiums, *ib.* 2285–2287—Unimportance of a penalty of 50 *l.* a day as compared with the saving by economy of fuel, *ib.* 2288.

Further reference to the penalty of 50 *l.* a day as being altogether inadequate and operating really as a premium upon delay, *Knight* 2470–2475—Doubt as to the time being fixed in the former contract; at all events, no penalties were enforced, *ib.* 2481 2484. 2499—Question whether the agreement between the Post Office and the Peninsular and Oriental Company, in February, was not a consequence of the present inquiry, *ib.* 2496–2502.

Instances of the very strict action of the Post Office in the matter of premiums and penalties, *Howell* 3004–3006—Inaccuracy of a statement by Mr. Knight, as to the company being under no penalties, *ib.* 3007—Excess of premiums over penalties on the Australian line, *ib.*—Exception taken to the statement that it suited the company to go slowly, and to pay penalties in order to save coals, *ib.* 3031–3033—When the

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papers and returns are received from Bombay &c., there will doubtless be penalties chargeable on some voyages, *Howell* 3062.

Total of 2,100 *l.* as the excess of penalties over premiums on the service, between Point de Galle and Sydney, for the year 1865, *App.* 226.

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6. Monopoly of the Company: Suggestions on the Subject of Competition:

Great grievance to Western India through this subsidy to the Peninsular and Oriental Company giving them a monopoly of the passenger communication to Bombay, *Knight* 465-483—Great importance of two companies carrying on the service, and of excluding the Peninsular and Oriental Company from a monopoly of the subsidy, *ib.* 466-483.

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Further statement as to there being a bar to all competition on account of the enormous subsidy of the company, *Knight* 2313, 2332—Proposition made by witness to the Post Office in March 1865, upon the subject of a fortnightly mail service between Bombay and Suez, by an independent company in India; no subsidy was asked for, but only the ocean postage, *ib.* 2314-2316—Great importance attached to competition in the postal communication with the East, so that in the public interests it is highly expedient to give a footing to a competitive company, *ib.* 2327-2336, 2343-2347.

Approval of the Peninsular and Oriental Company returning their present fortnightly service, whilst they should be excluded from tendering for a further fortnightly alternate service, *Knight* 2332-2336, 2358—Great reduction anticipated in the rates of passage money on the Bombay line, if there were competition, *ib.* 2343-2345, 2347, 2402-2415—Approval of the competition of the French Company being made more available, *ib.* 2419, 2420.

Opinion of the Government of India, and of the Indian Post Office, in favour of new Companies being allowed to compete for the service, *Bourdillon* 2553-2556.

Circumstances of there being competition in the Red Sea by vessels not having a subsidy, *Howell* 3024—Circumstance of a competition on the New York line having had no effect upon the rates, *ib.* 3025.

Opinion expressed by the Director General of the Indian Post Office in favour of the contract for an additional mail service to Bombay being, if possible, given to some other company than the Peninsular and Oriental Company, *App.* 289.

7. System of Accounts and Rate of Profits:

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Reference to certain returns as disproving Mr. Knight's statement that the accounts of the company were so made up as to conceal their profits, *Howell* 3021—Unsound condition of the company if they did not make proper reserves for depreciation and other purposes, *ib.* 3043, 3044—Moderate dividends paid by the company, *ib.* 3043—Small dividends paid on the underwriting account, *ib.* 3043, 3044.

8. Suggested Enlargement and Improvement of the Company's Fleet:

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9. Contemplated Increase of the Term of Contract in consideration of the Outlay necessary for New Vessels:

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Recommendation by the Committee that in consideration of the outlay that must necessarily be incurred in the construction of new vessels, or adapting those now employed for

9. *Contemplated Increase of the term of Contract, &c.*—continued.

See also *Aden*. *Australia* 1. *Bombay*, I. II. *Calcutta*, 1. *China*, 1.
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Government Officials. *Japan*. *Marseilles to Alexandria*. *Mauritius*.
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Speed of Mail Packets. *Troops, Conveyance of*.

1. *Particulars as to the Condition and Working of the Persian Telegraphs generally, and as to the Amendments required :*
2. *Particulars in connection with the Persian Gulf Line ; its satisfactory condition and Working :*
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- Satisfactory working of the line from Bagdad to Teheran and Bushire, there being English signallers right through, *Greener* 1953-1955—Advantage of the Teheran line as an alternative route: arrangement as to the proportion of messages to be sent by this line, *ib.* 2011-2014.

Good condition, for the most part, of the line through Persia, *H. Walton* 2031. 2047. 2057-2060—Obstruction caused during the past winter by the snow, where a portion of the line had been taken through a defile: alteration being made at this point, so that the interruption will not again arise, *ib.* 2031, 2032—Evidence as to the advantages of the Persian line, in conjunction with the Russian, for the transmission of messages between India and England, *ib.* 2036-2055—Steps taken for putting up a second wire through Persia, to be reserved for Indo-European messages, *ib.* 2036. 2055.

Employment of both English and French signallers on the Persian line, *H. Walton* 2037. 2044—Convention between Russia and Persia as to the working of the line between Teheran and the Russian frontier, *ib.* 2037. 2049, 2050—Objection by the Persian Government to any foreign interference as regards the protection of the line, *ib.* 2044, 2045—Very good working of the line between Teheran and Tabreez, *ib.* 2047, 2048.

Employment on the Persian line of men who had served in the Indian Department, but who had resigned on account of their inadequate pay in India, *H. Walton* 2062-2065
 ---Better remuneration of signallers, &c., in Persia than in India, *ib.* 2084-2092
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Statement in Major Champain's report as to the delay experienced on the Russian and Persian lines, the latter line being blocked up with snow during the winter, *Thornton* 2691, 2692—Satisfactory working of the lines through Persia, with the exception of the line from Teheran to Erivan, which is in very bad condition, *Siemens* 3391-3394—Good working recently of the line between Teheran and Bushire, *Goldsmid* 3492—Bad working of the line from Teheran to Tabreez, owing chiefly to its being entirely under Persian superintendence, *ib.* 3493-3498—Persia has at last allowed an establishment of fifty Englishmen on the lines for the next five years, *ib.* 3498.

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Inefficiency of that portion of the Russo-Persian line between the Russian frontier and Teheran, in respect of which a telegram has just been sent to Teheran, at the instance of the India Office, with a view to its being placed under English superintendence, *Thompson* 3588, 3589.

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Statement in letter from Mr. Courtenay, dated Constantinople, 21 February 1866, as to the bad state of the Persian lines since the 5th December, *App.* 522—Further statement by Major Champain in his report of 12 April 1866, relative to the defective working of the line in Persia, *ib.* 622. 624.

2. *Particulars in connection with the Persian Gulf Line, its satisfactory Condition and Working:*

Total of 2*l.* 19*s.* as the charge for the Indian and Persian Gulf lines, *Hon. R. Grimston* 601, 602—Very good working order of the submarine cable, *Clark* 649-660—Improved character of the Persian Gulf Cable as compared with the former Red Sea Cable, *ib.* 679-681—Necessity at present of using the Persian Gulf line or the Russian line in all telegraphic communication with India, *ib.* 739-744—The bottom of the Persian Gulf is more favourable than the bottom of the Red Sea, *Jenkin* 1810.

Accurate and expeditious working of the Indo-European line, from Fao to Kurrachee, *via* the Persian Gulf, *Greener* 1904-1906—Witness left Kurrachee very recently, and the line was then in an excellent condition, *H. J. Walton* 3113-3118—Between Fao and Kurrachee the average has been all along under two hours, *ib.* 3116. 3118—There has been no interruption to the regularity of the service, except for a short time when the cable broke, *ib.* 3117—Transmission of all the messages over the Persian Gulf line in English, *ib.* 3148, 3149.

Large excess of receipts over expenses on the Persian Gulf line, whilst the profits would probably be doubled if the telegraphs to England on the one hand and into India on the other were efficiently administered, *H. J. Walton* 3153-3160. 3178-3181. 3190-3194—Continuous night and day service on the line, *ib.* 3161—Excellent staff of signallers employed, *ib.* 3162—Absence of interference on the part of the Arabs, *ib.* 3164, 3165—Large local traffic on the line, *ib.* 3167—Control by the Bombay Government of the Persian Gulf line, from Fao to Kurrachee, *ib.* 3182-3184. 3222, 3223.

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Returns showing the number of telegrams from the Continent of Europe to India, and *vice versa*, and the amounts due to the Persian Gulf line for the same during the year 1865, *App.* 626, 627.

Exclusive control of the Indian Government over the line from Fao to Bushire and Kurrachee, which on the whole works exceedingly well, *Rep.* x.—Total number of messages which passed over the Persian Gulf line, and total earnings, from the opening of the line in February 1865 to the end of the year; also in the first four months of 1866, *ib.*—Annual working expenses of the line adverted to, *ib.* xi.

Conclusion of the Committee as to the defective telegraphic communication being largely owing to the neglect of the Indian authorities to make adequate provision for the distribution from Kurrachee upon the opening of the Persian Gulf line, *Rep.* xii.—Reference to the contemplated lease or purchase of the Persian Gulf line, as part of a scheme for an amalgamation of the different existing administrations, *ib.* xiv.

3. *Suggestions for an Alternative Line through Persia to India, in addition to that by the Persian Gulf:*

Advantage of the alternative route by way of Persia to the Persian Gulf line at Bushire, *Greener* 1963—Reference to the contemplated extension of the line from Ispahan to Bunder Abbas, *H. Walton* 2114—Contemplated construction of a land line from Kurrachee by Bushire to the head of the Persian Gulf, *Robinson* 2947, 2948.

Satisfactory working of the line from Kurrachee to Gwadar; great advantage if this line were extended to Bunder Abbas and on the Bushire, *H. J. Walton* 3134-3147—Insufficiency of the Persian Gulf for the transmission of an increased number of messages, so that a land line through Persia is very desirable, *ib.* 3140-3147. 3150, 3151—Sufficiency of the Persian Gulf line and one other line for all the messages likely to be sent to China, Australia, &c., as well as to India, *ib.* 3150, 3151.

Suggestion as to the expediency of a land line from Teheran to Gwadel in connection with Kurrachee, so as to afford an alternative route, *Siemens* 3411, 3412—Inquiries made

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made by witness at the end of 1861 and again in 1863, upon the question of a telegraphic line from Kurrachee to Bunder Abbas, *Goldsmid* 3463, 3464.—Result of witness's inquiries in Persia, that a coast line may be carried from Gwadar to Bunder Abbas without any great difficulty; suggestions as to the route to be taken, *ib.* 3465-3474.—Degree of risk attending the Gulf line, so that an alternative line is very desirable, *ib.* 3466.

Advantages of a line from Bunder Abbas to Ispahan by way of Kerman and Yezd; large local use to be made of this line, *Goldsmid* 3475-3488. 3543-3545. 3564, 3565.—Much better communication with India by way of Bunder Abbas and Ispahan than by way of Bushire and Shiraz, *ib.* 3489-3491.—Reference to the views of Colonel Stewart in favour of a line to Bunder Abbas, joining at Shiraz instead of Bushire, *ib.* 3489, 3560-3565.—Difficult country between Shiraz and Bushire, whilst the line between Ispahan and Shiraz has failed very much during the winter from snow storms, *ib.* 3489, 3490. 3535-3542.—Doubt as to the Persian Government having much objection to an alternative line from Ispahan to Bunder Abbas, *ib.* 3546. 3562.—Feeling on the frontier, between the Persians and Beloochees, &c.; outline of the frontier boundary between Kêlat and Persia, *ib.* 3546-3553. 3568, 3569.

Suggestion by the Madras Chamber of Commerce in letter of 5 April 1866 as to the great importance of an alternative land line between Fao and Kurrachee, *App.* 617.

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Necessary interruption of all telegraphic communication with India in the event of an accident to the submarine cable to Kurrachee, *Rep.* x.—Recommendation that the communication by way of the Persian Gulf be doubled, either by the laying of a second submarine cable, or by continuing the land line from Kurrachee and Gwadel to Bunder Abbas, and thence, under arrangements with the Persian Government, to Ispahan, by way of Kerman and Yezd, *ib.* xi. xvi.

4. *Correspondence and Papers, &c.*

Official correspondence commencing in May 1861 and terminating in December 1863, respecting the construction of a telegraph line through Persia, *App.* 355 *et seq.*—Proposition on the part of the India Office on 17th May 1861, that the line shall commence at Bagdad, proceed from thence to Teheran, and from that city, *viâ* Ispahan and Shiraz, to Bunder Abbas, *ib.* 357.—Modified arrangements proposed on the part of the Persian Government, in communication dated 20th May 1861: subsequent correspondence thereupon, *ib.* 357-359.

Sundry communications from Mr. Alison, Her Majesty's Minister at Teheran, and from Mr. Thomson, showing the result of their negotiations upon the question of the proposed telegraphic line, *App.* 358 *et seq.*

Memorandum dated Teheran, 6th November 1861, containing the articles stipulated for by Persia, with reference to the proposed line from Bagdad to the port of Kurrachee, *App.* 360, 361.—Statement in letter from Mr. Thomson, in December 1862, that the Shah had decided upon at once undertaking, at his own expense, the construction of a line from Khanakeen, on the Bagdad frontier, to Bushire, through Teheran, Ispahan, and Shiraz, *ib.* 366.—Memorandum of terms which the Persian Ministers had agreed to offer to the English Government previous to the determination of the Shah to construct the line between Khanakeen and Bushire at his own expense, *ib.* 367.

Articles of convention respecting the construction of a line to Bushire, proposed by Mr. Eastwick to the Shah on 17th December 1862, subject to the approval of the British Government, and accepted by the Persian Government, on the same condition, *App.* 370.

Correspondence and memoranda in 1863, with reference to the supply and dispatch of stores from England and India, and the measures for carrying out the construction of the line under English superintendence and direction, *App.* 370 *et seq.*

Memorandum dated 7th August 1863, detailing the steps which have been taken up to that date in connection with the dispatch of stores, &c., from England, for the construction of the line, *App.* 383-385.

Letter from Colonel Kemball, dated 18 November 1863, with reference to the progress being made in the construction of the line between Bagdad and Khanakeen, *App.* 405.

5. *Convention between Her Majesty and the Shah of Persia:*

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6. *Convention between Persia and Turkey:*

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Conclusion of the Committee as to the great political importance of permanent means of telegraphic communication with the East, at all times available and reliable, *Rep.* ix.

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Impression that the Indian Office was not consulted by the Post Office with reference to an alleged contract with the Peninsular and Oriental Company on 27th February last, *Bourdillon* 2557, 2558.

Instances of harsh interpretation of the contract on the part of the Post Office, showing the groundlessness of Mr. Knight's insinuation that matters are comfortably adjusted between the Post Office and the Company, *Howell* 3004-3006.

Correspondence on the part of the Post Office in connection with the question of a weekly mail to Bombay; proposition therein for an increase of postage, in the absence of which it is contended that the increased expense should be borne by the revenues of India, *App.* 234 *et seq.*

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POSTAGE:

1. *Generally as to the Postage under existing Arrangements.*

2. *Question of Increase of Postage in connection with a Weekly Mail to Bombay.*

1. *Generally as to the Postage under existing Arrangements:*

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RED SEA AND INDIA TELEGRAPH:

1. *Red Sea Cable; Causes of its Failure.*
2. *Cable from Aden to Kurrachee; Route taken and Causes of Failure.*
3. *Facility of a Line by way of the Red Sea; Suggestions on the subject.*

1. Red Sea Cable; Causes of its Failure:

Explanation as to the causes of the failure of the Red Sea line first laid down, *Sir M. Stephenson* 631-635; *Glass* 1739—Investigation by witness into the causes of the failure of the former line in the Red Sea; particulars hereon, *Clark* 676-678—Defective character of the cable laid in the Red Sea in 1859; opinion that its failure was caused by its lightness and by its having been payed out too tight, *Forde* 1790-1798—Good material used in the manufacture of the Red Sea cable; the cable was, however, too light; and was laid too taut in some places, *Jenkin* 1814, 1815—Opinion that no injury resulted to the cable from the high temperature of the Red Sea, *ib.* 1834, 1835.

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Letter from Colonel Douglas to the Government of India, dated 9 November 1861, with reference to the communications from the Chambers of Commerce, and the question of the adoption of certain amendments, *App.* 425–428.

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Letter from the Secretary to the Government of India to the Bengal Chamber of Commerce, dated 15 January 1862, in reply to the communication of the latter in August 1861, *App.* 428-430.

xvi. Details of Improvements on the score of Construction, supply of Insulators, &c.

Steps being taken for reconstructing the lines, though this will be a work of time, *Strachey* 2564, 2565. 2608-2610—Statement showing the important steps taken by Government for improving the Indian telegraphs; very large expenditure for the purpose during the last year, *Thornton* 2696-2700—During the last year the Government of India have made requisitions to the extent of 86,000 *l.*, most of the articles required having been complied with, though some delay has been unavoidable, *ib.* 2697-2699.

Explanation relative to certain portions of Mr. Walton's evidence as to the defective construction and administration of the telegraph in India; this evidence is not applicable to the present time, great improvements having been adopted, *Thornton* 2701-2704—Remedy, since Mr. Walton left India, of the system of centralisation complained of in his evidence, *ib.* 2703—For the last eighteen months the Government of India have set themselves heartily to work to improve matters, *ib.* 2745, 2746.

Every effort has been made of late to improve the construction, but much delay has been unavoidable, *Robinson* 2827. 2887—Witness fully expects that before June 1867 the Indian lines will be equal to any in the world, except where peculiar obstacles are imposed by the physical difficulties of the country, *ib.* 2830—Reference to a certain report by witness containing recommendations as to the measures necessary in order to make the Indian telegraph lines thoroughly effective, *ib.* 2884-2886.

The faults of construction, and of an underpaid staff, have been strongly represented by witness to the Indian Government, who have promptly complied with his requirements, *Robinson* 2887, 2888—Summary of the improvements already effected or now in course of being carried out, *ib.* 2912—Very short time necessary for the transmission of messages between Kurrachee and Calcutta or Bombay within a few months from the present time, when second wires are up, *ib.* 2932-2937.

xvii. Question of a Transfer of the Lines from Government to a private Company.

Considerable delay on the part of Government in replying to an application in 1863 relative to taking over the Indian telegraphs, *Clark* 706-708—Decided advantage to the community in India by the telegraph service being under one company, instead of under various railway companies, or under Government, *Adley* 2152-2158—The Government could not or does not cultivate the traffic in the same way that a company would do, *ib.* 2154-2157.

Non-objection on the part of the Government to the formation of a private company to transmit commercial messages between Calcutta and Bombay, *Strachey* 2579, 2580—Objection by Government to the interference of a private company where the Government lines are already capable of doing all the private or commercial business, *ib.* 2580, 2581—Unwillingness of Government to allow any private company to work except under the Telegraph Act, and with a license, *ib.* 2582, 2583.

Necessity of Government maintaining a large portion of the telegraphs for public purposes, as many of the lines could not be worked at a profit by private companies, *Strachey* 2584—Consideration of the question whether in the interests of the Indian revenues there should not be an extensive amalgamation of the Government telegraphs with the railway telegraphs when they both run between the same towns, *ib.* 2586-2604—Doubt as to the expediency of Government giving up the more remunerative lines, and retaining only those which are not used for commercial purposes, *ib.* 2599. 2605—Approval of Government retaining control of those lines where they are capable of doing the private business, as they would be if the lines were constructed and managed on an improved system, *ib.* 2606, 2607.

Dissent from the view that, because the Government telegraphs have hitherto been badly administered, the proper remedy is to be found in their transfer to a private company, *Strachey* 2629—Argument that the telegraphs in India constitute essentially a public interest, which can better be dealt with in the hands of Government than of a private company; analogy in this respect between the telegraph and the Post Office, *ib.* 2629. 2630. 2639-2646—Conclusion as to the impracticability of finding capital for the construction and administration of telegraphs in India without the aid of a Government guarantee, *ib.* 2631, 2632. 2636-2638.

Several respects in which the executive local management is calculated to be more satisfactory when under the Government of India than when under a private company, *Strachey* 2633, 2634—Argument opposed to the view that more efficient and more economical

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1. *Government Lines*—xvii. Question of a Transfer of the Lines, &c.—continued. economical administration is likely to result from the motive of private interest than from that of public interest, *Strachey* 2639-2644.

Examination opposed to the view that under a Government administration of the telegraph, as compared with administration by a company, commercial interests are likely to be set aside, and undue preference given to political considerations, *Strachey* 2655-2668 —Opinion that, by an improved organisation, there is no reason why the public or commercial interests should not be amply consulted under Government administration, *ib.* 2660, 2668.

Grounds for objecting to a transfer of the Government telegraphs, as well as of the railway telegraphs to a private company, *Thornton* 2811-2814 —Much less probability of corrupt conduct in Government officials in India than in the servants of private companies, *Robinson* 2844.

Conclusion expressed by the Calcutta Chamber of Commerce, in August 1861, that telegraphic communication in India would be worked more satisfactorily and profitably to the Government and to the public if it was entrusted to private enterprise, for which capital could readily be found in England, *App.* 420.

Objections urged in communication from Colonel Douglas against the proposition for the working of the lines by means of private enterprise, *App.* 427, 428.

xviii. Conclusions and Recommendations of the Committee:

The Committee consider that one of the chief causes of the complaints as to the imperfect performance of the telegraphic service between this country and India, is to be found in the neglect of the authorities in India to make adequate provision for the distribution from Kurrachee, *Rep.* xii—Unsatisfactory working of the Government lines, and causes thereof, *ib.* xiii—Recent adoption of efficacious measures for improving the administration of the service from Kurrachee, *ib.*—Reference to the refusal of the Indian Government to accede to a suggestion made in 1862 for making over the lines to a private company for administration, *ib.*

2. *Railway Lines*:

i. Generally as to the Working of the Railway Telegraphs:

Details explanatory of the working of the telegraphs of the East Indian Railway Company; their superiority as compared with the Government telegraphs, *Adley* 2122, *et seq.*—Belief as to the railway telegraphs being well constructed and properly managed, *Strachey* 2588—Admission as to the facility of inspection and repair of railway lines of telegraph, as compared with the Government lines, *ib.* 2591-2598—Very fair manner in which the railway telegraphs are worked, *Robinson* 2845, 2846—Much better pay on the Government lines than on the railway lines, *ib.* 2845.

ii. Number of Miles of Telegraph, and Cost of Construction:

Return showing the expenditure of the companies in India and in England in respect of telegraphs up to 31 December 1864, and the number of miles of telegraph lines, and stations open in each year, *App.* 524-530. 615—Total of 411,924 *l.* as the expenditure on railway telegraphs up to 31 December 1864, *ib.* 615.

Aggregate of 3141 miles of lines erected by the railway companies at a cost of 411,924 *l.*, *Rep.* xiii.

iii. Annual Receipts and Working Expenses:

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Statistics of annual receipts and expenditure in respect of the railway companies' telegraphs in 1863 and 1864, *App.* 524-530. 615, 616—Total working and maintenance expenses, and total receipts for messages in 1864, showing a net loss of 28,399 *l.*, irrespective of interest on capital, *ib.* 615.

iv. Question of Administration by a single Company:

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tions which have hitherto prevented the adoption of this scheme, *Adley* 2147-2151—Necessity of a public company erecting special wires, and having special clerks, irrespectively of the wires for railway messages, *ib.* 2148-2152—The Governor General does not seem opposed to the principle of one public company, *ib.* 2148. 2151—Objection by the railway authorities in India to the terms proposed, *ib.* 2148. 2151.

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Examination to the effect that witness cannot supply the reasons for the refusal by the Indian Government to sanction the transfer of the railway telegraphs to a private company, *Thornton* 2712-2726—Impression as to the Government of India being favourable, rather than otherwise, to the trial of a private company, *ib.* 2713-2715—Approval of the railway telegraphs being transferred to a private company; valuable competition by this means, *ib.* 2810-2817.

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See also *Alexandria.* *Australia,* 2. *Belgrade.* *China,* 2. *East Indian Railway.* *Egypt.* *Electric and International Telegraph Company.* *France.* *Italian Route.* *Kandahar.* *Malta and Alexandria Telegraph.* *Mediterranean Extension Telegraph.* *Moulmein.* *Opium Messages.* *Oriental Bank Corporation.* *Persia, and Persian Gulf Cable.* *Press of India.* *Red Sea and India Telegraphs.* *Russia.* *Singapore,* 2. *Submarine Cables.* *Turkey.*

Thompson, E. P. Abercrombie. (Analysis of his Evidence.)—Explanation that in consequence of the Prussian war, and of an intimation received from Count Bismarck, it has been suggested to the telegraph companies that telegrams through Prussia should not be labelled to go by any particular route, 3578-3582—Dependence now placed practically on the Russian route, the line being in an efficient state as far as the Russian frontier, 3583-3588—Inefficiency of that portion of the Russo-Persian line between the Russian frontier and Teheran, in respect of which a telegram has just been sent to Teheran, at the instance of the India Office, with a view to its being placed under English superintendence, 3588, 3589.

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[Second Examination.]—Refers to a recent report by Major Champain, as showing that great improvement has taken place in the working of the Turkish portion of the Indo-European telegraph, 2682-2685. 2691—This improvement is not a result of the appointment of the present committee, 2685. 2782—Very great delay experienced last year in the transmission of messages over the Turkish line, 2686, 2687.

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Confirmation by Major Champain, of the statement that a message had been sent from Constantinople to Kurrachee, and an acknowledgment received, within three minutes, 2725—Letter from Major Champain in March, in which he states that the working of the Indo-European line between Constantinople and Kurrachee in the month of February had been very good, 2726. 2737, 2738—Statement by Major Champain as to the delay experienced in transmitting messages *viâ* Russia; subsequent inquiry by Government into this matter, 2726.

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the Porte in respect of the line from Bagdad to Fao, 2754-2756—Doubt as to the relative working of the Bagdad and Fao line, which is under the general superintendence of Colonel Kemball, and of the line between Bagdad and Constantinople, which is entirely under Turkish superintendence, 2757-2759.

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Employment of Europeans, as well as of natives and Eurasians on the telegraph lines in India, 2772-2774—Question considered, whether it would not be desirable to transmit messages in the native language, 2775-2777. 2780, 2781—Mismanagement owing to which some messages between Bombay and Calcutta having been many days on the route, 2778, 2779.

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With regard to the telegraph line between Diarbekir and Alexandria, no cognizance is taken of it in the India Office, it being known that the Turks are not in a condition to guarantee its efficiency, 2822.

Witness lays before the Committee a copy of the Act of 1860, for regulating the establishment and management of the telegraphs in India, 2823.

Time Tables (Postal Contracts). Reference to a comparative statement of the time for the different services under the old and new contracts, showing that in no case is the time longer under the new agreement, but is in three instances slightly less, *Hill* 3597.

Time Table of the India, China, Australia, and Mauritius Mail Service for the year 1864, as approved by the Postmaster General on 2nd November 1863, *App.* 218-221.

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"Times of India" Newspaper. Comment upon some statements in the *"Times of India,"* reflecting strongly on the witness's company: inaccuracy of these, *Howell* 3021.

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Trade. Immense importance of the telegraph in the conduct of trade, so that the post is becoming subsidiary to the telegraph, *Nelson* 813-815; *Shand* 968-973; *M. Micking* 1066-1073—Frequent loss to merchants under the present uncertain and inaccurate system of late, *Nelson* 813, 814—Advantage derived even from the former imperfect plan of telegraphing to Suez in order to catch the steamer for Bombay, *ib.* 819-821—Valuable character of the China trade, so that telegraphic communication with that country is very desirable, *ib.* 832-837.

Great attention and improvement in the mode of transaction of business between England and India since the introduction of telegraphic communication, *Crake* 905-

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921—Effect of the telegraph not only to increase the orders for Indian cotton, &c., and to decrease the risk, but to enable a repetition of transactions to be carried out with a smaller capital, *Crake* 910-921—Great value of the telegraph in the mercantile transactions between this country and the East, *Robinson* 1116-1119—Frequent use of the telegraph by witness's firm; testimony to the great importance of this means of communication, *Green* 1147-1154. 1168-1172.

Reference to certain statistics, as showing the immensity of the trading and shipping interest to be accommodated by an extension of the telegraph to China and Australia, *Gisborne* 3264. 3267-3276—Reference to statistics of the immense trade between England and China, and between India and China, *ib.* 3268-3273—Immense value of the trade of Australia, besides which there is the large bullion export, the whole being interested in telegraphic communication with the East and with England, *ib.* 3303-3307. 3327-3330.

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General summary of the foreign and local trade and shipping expected to make use of the proposed telegraph to Singapore, China, and Australia, *App.* 632-635.

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Transit through Egypt. Great reduction in the transit rate for first-class passengers from Suez to Alexandria, *Howell* 1571—The rate for a first-class passenger, including three cwt. of luggage, is now 4 *l.* 10 *s.*, *ib.*—At one time the transit rate was 12 *l.*, *ib.*

Contract time of twenty-four hours for the transit through Egypt of the Marseilles portion of the mails, and of forty-four hours for the transit of the Southampton portion, *App.* 218, 219.

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Treasury, The. Approval by the Treasury of a weekly mail to Bombay, if the Indian Government would pay the increased cost, *Hill* 205. 218-226—Statement as to the Treasury having objected to a weekly mail to Bombay, on the ground only of the increased cost to this country, *Bourdillon* 2524-2528—Reference to the intimation by the Treasury in December last, that they should not further press the question of increased rates of postage as a condition of a weekly mail, *ib.* 2551.

Invariable refusal of the Treasury to assist by subsidy, or guarantee the proposed lines of telegraph from Singapore to China and Australia, *Gisborne* 3262-3264.

Letter from the Treasury to the Post Office, dated 14th December 1865, refusing to sanction the increased charge of a weekly mail service to Bombay (the Government of India objecting to any increase of postage) unless the Indian Government should think fit to deray the entire amount of increased charge, *App.* 291.

Letter from Mr. Wilson, as Secretary of the Treasury, to the Postmaster General dated 11th July 1854, proposing that one half the net loss on the mail service to India, China, &c., be borne by the Indian Government, *App.* 559, 560—Objections raised by the Court of Directors against the foregoing arrangement, *ib.* 613, 614.

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Troops, Conveyance of. Letter from the Peninsular and Oriental Company to Sir Charles Wood, in June 1863, upon the question of contracting for the conveyance of troops to and from India by the overland route: this letter has never been answered, *Howell* 1481, 1482. 1503—Great practical difficulty in attempting to combine the conveyance of troops with that of passengers as one service, *ib.* 1482-1491. 1503 *et seq.*—Heavy cost of keeping vessels unemployed at the other side of Suez, whereas they could not be employed in the hot seasons for the conveyance of troops, *ib.* 1483. 1487-1489. 1507-1521—Exceptional circumstances, as during the mutiny, under which the company have conveyed a good many troops in their passenger ships, *ib.* 1490.

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Impossibility of the Company conveying a whole regiment or battalion in a passenger-ship between Suez and Bombay; necessity of special ships for the purpose, *Howell* 1505-1508—Means of the Company as well as of Government for combining the transport of troops to Australia, New Zealand, &c., with a transport service between Suez and Bombay, *ib.* 1511-1520—Considerable trouble and expense in fitting up a passenger-ship as a troop-ship, *ib.* 1521-1525.

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TURKEY (TELEGRAPHIC COMMUNICATION):

1. *Statements as to the Defective Working of the Telegraphs through Turkey up to a recent Period, and as to the Remedies required.*
2. *Statistics of the Time of Transmission of Messages to and from India viâ Turkey.*
3. *Considerable Improvement recently.*
4. *Convention between England and Turkey.*
5. *Convention between Turkey and Persia.*
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1. *Statements as to the Defective Working of the Telegraphs through Turkey up to a recent Period, and as to the Remedies required:*

Delay and inaccuracy in transmission through Turkey, *Sir J. Carmichael* 759. 775—Great delay experienced in sending London messages for Alexandria *viâ* Constantinople and Syria, *Glass* 1644-1656—Delay and neglect in Turkey and in Egypt, owing to the apathy and idleness of the native clerks, *ib.* 1695-1700. 1761—Imperfect working of the line attributed chiefly to the neglect of the Turkish-line men, more especially when the insulators get broken, *Greener* 1879-1882.

Constant error in the transmission of messages, through the clerks at the stations being mostly Armenians, few of whom understand English; there should in fact be two clerks at each station competent to read English, *Greener* 1883-1886—Repetition of the message several times between Constantinople and Fao, whereas under proper management a message might be sent to Fao in two hours, *ib.* 1887, 1888—Indifference of the officials in regard to the adoption of improvements, *ib.* 1889, 1890—Occasional instances of messages being kept for days without being forwarded, *ib.* 1891, 1892—Probability of the later messages being sometimes the first forwarded, when there is a large arrear to be overtaken, *ib.* 1893, 1894.

Satisfactory working of the line through Turkey, if there were some good English signallers and inspectors, together with some Turkish sub-inspectors, *Greener* 1895-1901—Entire inadequacy of the present inspection of the line, *ib.* 1896. 1936—Expediency of some pressure upon the Turkish government, in order that the terms of the convention with this country as to the working of the telegraph lines, may be properly fulfilled, *ib.* 1915-1919—Messages should reach Kurrachee from Constantinople in three or four hours, *ib.* 1922-1924.

Facility of always working through from Constantinople to Bagdad, if there were one wire always available, with the insulation properly kept up, *Greener* 1925-1934—Insufficiency of the maintenance arrangements on the Turkish lines further adverted to, *ib.* 1935-1937—Delays through there not being a regular system of change of clerks, as there is on the Persian Gulf line, *ib.* 1938-1941.

Circumstance of the Turks having put up a wire from Diarbekir to Scutari, but without insulators, so that it would not work, *Greener* 1964—Advantage if there were stronger insulators on the line through Asia Minor, as recommended by witness in his report to Colonel Kemball, *ib.* 1965-1970—Further statement as to the convention not having been carried out in regard to the appointment of signallers conversant with English; prospect of this being remedied in time, *ib.* 2002-2011.

Very great delay experienced last year in the transmission of messages over the Turkish line, *Thornton* 2686, 2687—Circumstance of the convention with Turkey not having been modified with regard to the employment of British signallers, &c., *ib.* 2760. 2763—Doubt as to there being more delay in Turkey than in Europe, *H. J. Walton* 3177-3179—Fault of the Turkish Government more especially that the telegraphic communication with India is so deficient, *Siemens* 3403—Suggested alteration of the convention with Turkey, so as to provide for the European side of Constantinople as well as the Asiatic side, *Goldsmid* 3573, 3574.

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TURKEY (TELEGRAPHIC COMMUNICATION)—continued.

1. *Statements as to the Defective Working of the Telegraphs, &c.*—continued.

Letter from Mr. Walton to the Government of India in October 1865, relative to the unsatisfactory working of the telegraph through Turkey and the delays experienced, *App.* 434-436.

Information in letter from Lieutenant Colonel Goldsmid to the Bombay Government in November 1865, with reference to the route of messages through Turkey, the delays experienced, and the remedies required, *App.* 436-440.

Very deficient working of the Turkish portion of the telegraphic system adverted to by Major Champain in letter of 31st August 1865, *App.* 442, 443.

Report by Major Champain, dated Constantinople, 12th April 1866, relative to the recent working of the Turkish portion of the line to India, and the measures necessary to render it thoroughly efficient, *App.* 619-624.

2. *Statistics of the Time of Transmission of Messages to and from India viâ Turkey:*

Average of two days and thirteen hours occupied by each message between Kurrachee and Constantinople in January last, *Thornton* 2726—Average of two days and six hours between Constantinople and Kurrachee in January last, *ib.*—Statement showing the much shorter time occupied in the transmission of messages from England to Kurrachee viâ Turkey than viâ Russia, *Goldsmid* 3503.

Return of messages received by the Electric and International Telegraph Company from India by the route through Turkey, in March, and from 1st to 16th April 1866, showing in each case the station from which sent, and the time taken in transmission, *App.* 540-555.

Summary showing the time occupied in the transmission of messages between Kurrachee and Constantinople, and *vice versâ*, in each month of 1865, *App.* 624—Great improvement during January, February, and March 1866, *ib.* 625.

Return showing the much shorter time occupied in transmission to Kurrachee viâ Turkey than viâ Russia, in February 1866, *App.* 625.

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3. *Considerable Improvement recently:*

The line from Bagdad to the head of the Persian Gulf was in very good condition and was working well when witness left, about five months ago, *Greener* 1860—Probable explanation with reference to a certain message from Constantinople to Kurrachee, the acknowledgment of which was said to have been received back at Constantinople in three minutes, *ib.* 2017-2024—Recent instance of a message having been sent from Constantinople to Kurrachee, and an acknowledgment received in three minutes, *H. Walton* 2034—Regular working lately between Constantinople and Fao, *ib.* 2034, 2035.

Reference to a recent report by Major Champain, as showing that great improvement has taken place in the working of the Turkish portion of the Indo-European Telegraph, *Thornton* 2682-2685. 2691—This improvement is not a result of the appointment of the present Committee, *ib.* 2685. 2782—Confirmation by Major Champain, of the statement that a message had been sent from Constantinople to Kurrachee, and an acknowledgment received within three minutes, *ib.* 2725.

Reference to a letter from Major Champain in March, in which he states that the working of the Indo-European line between Constantinople and Kurrachee, in the month of February, had been very good, *Thornton* 2726. 2737, 2738—Further letter from Major Champain on 30th April, in which he supplies particulars of the working of the Indo-European line during January, *ib.* 2726—Improvement in the management of the Turkish line rather than in the construction, there being now not much cause for complaint, *ib.* 2743-2753. 2760—Inquiry by Major Champain with reference to the question of a transfer of the Turkish line, he having found however that its administration had been greatly improved, *ib.* 2761—Great uncertainty whether the improvement will last, *ib.* 2762.

Statement by Major Champain, dated Constantinople, 26th February 1866, that during the last three or four weeks the communication by telegraph, both to India and London, has been surprisingly regular and prompt, *App.* 448.

Letters from Mr. Walter Courtenay, in January and February 1866, as to the very satisfactory working of the Turkish lines viâ Constantinople, *App.* 521, 522.

Statement by Mr. Courtenay, dated Constantinople, 21st February 1866, that a message was sent thence to Kurrachee on the 8th instant, the acknowledgment of which was received at Constantinople in three minutes afterwards, *App.* 522.

TURKEY (TELEGRAPHIC COMMUNICATION)—continued.

4. *Convention between England and Turkey:*

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5. *Convention between Turkey and Persia:*

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6. *Recent Despatch from the Turkish Minister for Foreign Affairs.*

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7. *Other details generally.*

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Valpy, Richard. (Analysis of his Evidence.)—Represents the Statistical Department of the Board of Trade, and submits various returns relative to the commerce between this country and India, &c., 15-19.

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Better remuneration of signallers, &c. in Persia than in India, 2084-2092—Charge for transmission in Persia and India respectively, 2093, 2094. 2112, 2113—Practice in Persia as to the language in which messages are transmitted, 2094-2096—Transmission of messages through Kurrachee, without their being translated at that point, 2097, 2098—Less cost of a message from Teheran to London *via* Russia than *via* Turkey, 2110, 2111—Separate treaties of Persia with Turkey, with Russia, and with this country, 2113—Reference to the contemplated extension of the line from Ispahan to Bunder Abbas, 2114.

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Letters from Mr. Walton, in May 1865, with reference to the defective working of the telegraph between Kurrachee and Bombay, *App.* 431-433.

Communication from Mr. Walton to the Government of India, in October 1865, with reference to the unsatisfactory working of the telegraph between England and Fao, and the delays experienced in Turkey, *App.* 434-436.

WEEKLY MAIL:

1. *Generally as to the expediency of a Weekly Mail to India via Bombay.*
2. *Details relative to the Views and Proceedings of the Indian and Home Authorities in the Matter.*
3. *Cost of the Proposed Service.*
4. *Question of Increasing the Postage.*
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7. *Explanatory Statements on the part of the Peninsular and Oriental Company.*
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1. *Generally as to the Expediency of a Weekly Mail to India via Bombay:*

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2. *Details*

Report, 1866—continued.

WEEKLY MAIL—continued.

2. *Details relative to the Views and Proceedings of the Indian and Home Authorities in the Matter:*

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Letter from Mr. Melvill to the Secretary to the Post Office in October 1860, expressing the concurrence of Sir Charles Wood in the opinion of the Government of India, as to the importance of the establishment as soon as possible of a weekly postal communication between England and Bombay, *App.* 231.

Communication from the Government of India to the Secretary of State for India, dated 31st August 1860, in support of a letter from the Director General of the Post Office in India in favour of a weekly mail to Bombay, and of the discontinuance of the service *viâ Galle* to Madras and Calcutta, *App.* 231, 232.

Letter from the Director-general of the Indian Post Office, dated 24th April 1860, explanatory of his views in support of the establishment of a weekly mail, the mail to Calcutta and Madras being at the same time discontinued, *App.* 232, 233.

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Communication from the Treasury to the Post Office, dated 14 December 1865, objecting to the expense involved in the establishment of a weekly mail service to Bombay, if unaccompanied with an advance in the postage, unless the Government of India should think fit to defray the entire amount of the increased cost of such service, *App.* 291.

Letter from the Governor General in Council to the Secretary of State for India, dated 22 February 1866, urging the adoption of some arrangement whereby India may obtain the great advantage of a weekly mail to Bombay without being compelled at the same time to pay part of the expense of maintaining another line of communication which is no longer of any service to India, *App.* 599.

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Report, 1866—continued.

WEEKLY MAIL—continued.

2. *Details relative to the Views and Proceedings, &c.*—continued.

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Official papers and correspondence of the Public Works Department and the Post Office, in India, in September, October, and November 1865, upon the question of expediting the conveyance of the mails by railway to Calcutta, &c. in connection with a weekly service between Suez and Bombay, *App.* 606–612.

Communication from Mr. Hill on the part of the Post Office to the India Office, dated 24 May 1866, justifying the course of action of the former department in regard to the question of a weekly mail to Bombay, and charging the responsibility in the matter upon the Indian Government, *App.* 653.—Argument on the part of the Post Office, that any loss to accrue from the proposed service should fall upon the Indian Government, as being chiefly attributable to the opposition of such Government to even a temporary increase in the rate of postage, *ib.*—Statement in this letter as to the inaccuracy of Mr. Riddell's calculations, *ib.*

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3. *Cost of the Proposed Service:*

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Views expressed by the Post Office in November 1862 and 1863, as to the expediency of raising the postage from 6 *d.* to 1 *s.* on each half ounce letter between England and India, in connection with a weekly mail to Bombay, *App.* 262. 271, 272.

Further statement by the Post Office in May 1863 in regard to the Indian authorities being moved to consent to an increase of postage in connection with the contemplated establishment of a weekly mail to Bombay, *App.* 272, 273.

Further communication from the Post Office to the India Office, in May 1865, urging the adoption of steps for obtaining the consent of the Indian Government to the proposed augmentation of the postage, in connection with a weekly mail, *App.* 276, 277.

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Further communication from the Post Office, dated 14 July 1865, as to the objection to a weekly mail to Bombay, on the score of cost, unless the rates of postage be increased, *App.* 284–286.

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5. *Effect*

WEEKLY MAIL—continued.

5. *Effect upon the Passenger Traffic:*

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Doubt as to passengers from Suez using the railways from Bombay to Calcutta and Madras in preference to going round by steamer, *viâ* Galle, *Howell* 1268-1270—Probability of the vessels *viâ* Galle having at certain seasons full cargoes of passengers to and from Australia and China, even if the great bulk of Indian passengers were to use a weekly line to Bombay, *ib.* 1317-1336.

6. *Suggestions as to the Number and Class of Vessels, and the Rate of Speed:*

Explanation of a plan submitted by witness to Sir Charles Trevelyan, when Finance minister in India, for greatly expediting the service between England and India, and for a weekly service between Suez and Bombay; vessels proposed for the service, *Rennie* 388-399.

Calculation that a speed of eleven knots an hour instead of nine and a-half knots for a weekly service between Bombay and Suez would involve an increased expense of 27,300 *l.* a year for coal, *Samuda* 2942—Proposed construction of five new ships which, in addition to the "*Simla*," should suffice for a weekly service on the Indian side at the rate of eleven knots; seven vessels on this line would, however, be better, *ib.* 2955-2957. 2989.

7. *Explanatory Statements on the part of the Peninsular and Oriental Company:*

Application made to witness's company by the Post Office upon the question of a weekly service to India in lieu of the services per month, *Howell* 1259, 1260—Offer by the Company to undertake a weekly service or fifty-two voyages instead of forty-eight for an addition of one-twelfth to the subsidy, *ib.* 1261, 1262—Due consideration given by the company to the question of a weekly mail to Bombay, the fortnightly mail to Calcutta and Madras being dispensed with; obstacles to this arrangement, the company being however prepared further to consider the matter, *ib.* 1263-1278.

Calculation, showing that there would on the whole be a diminution of 178,698 miles by making certain alterations in the present services to India, China, and Australia, including a weekly service, between Suez and Bombay, *Howell* 1447-1459.

Objections urged by Mr. Ritchie on the part of the Peninsular and Oriental Company in December 1860 against the proposal for a weekly mail to Bombay, to embrace also Calcutta and Madras by means of a weekly service overland from Bombay, *App.* 234-236.

Communication from the company to the Post Office, dated 15th October 1862, upon the question of tendering for a mail service twice a month between Aden and Bombay, *App.* 267-270.

Statement on the part of the Peninsular and Oriental Company in February 1865 as to the large increase of expense involved in a weekly mail from England in lieu of a mail four times a month, *App.* 274-276.

Letter from the superintendent of the company at Bombay to the Bombay Government, dated 30th May 1865, with reference to an additional fortnightly mail service between England and Bombay, *App.* 287.

Statement showing the mileage involved in a weekly mail to India, *viâ* Bombay, and a fortnightly mail to China from Suez, *App.* 565—Mileage table of a weekly service to Bombay, and a weekly mail to China, *viâ* Bombay and Calcutta alternately, *ib.*

8. *Views of the Committee as to the Expediency of the proposed Service:*

Important advantages to be derived from a weekly mail to Bombay, so that the question of increased cost should not be an insuperable obstacle, *Rep.* v-vii—Reference to the views expressed by the Director General of the Post Office in India, and by the Governor General in 1860, in favour strongly of a weekly service *viâ* Bombay, *ib.*—Reference also by the Committee to the opinion of the Postmaster General in July 1865 as to the advantage of substituting for the present postal service with India a weekly service by way of Bombay exclusively, *ib.* vi.

Concurrence in the view of the Indian authorities as to the unfairness of the loss arising from a weekly mail falling upon India exclusively, *Rep.* vi, vii—Numerous leading merchants and bankers in London, Manchester, and Liverpool, and in India, from whom representations have been received, praying that a weekly mail might be established between London and Bombay, *ib.* vii—Dissent from the view of the Post Office that whatever additional expense might be entailed by the establishment of a weekly mail to Bombay, should be borne exclusively by the Indian Government, *ib.*

Report, 1866—continued.

WEEKLY MAIL—continued.

8. *Views of the Committee as to the Expediency, &c.*—continued.

Reference to the willingness expressed by the Indian Government, by a despatch in February 1866, to forward the establishment of a weekly mail, by accepting the responsibility of any loss that may thereby be incurred, *Rep. vii*—Conclusion of the Committee that the question of profit and loss within reasonable bounds is a consideration entitled to little weight in the case of so important a postal service as that between England and India, *ib.*

Data for the conclusion that the time has arrived when tenders should be invited for a weekly service to Bombay alone, *Rep. xv*—The proposed service should be on the footing of an express service, entirely unconnected, to the eastward of Suez, with any other mail services, *ib.*

See also *British India Steam Navigation Company. Calcutta, 1.*

Weight of Mails. Weight and measurement of the mails conveyed by each packet from Southampton in the years 1864 and 1865, *App. 570, 571.*

Wells, Lewis. (Analysis of his Evidence.)—Represents the Telegraph Construction and Maintenance Company, 3441—Explanation as to the company no longer receiving messages for transmission to India, *via* Egypt and Diarbekir, on account of the Turkish Government suddenly giving notice that they were unprepared to accept any European messages by the line, 3442-3457—Constant liability to delay in using the land lines through Egypt, 3450.

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Wood, Sir Charles. See *India Office, &c.*

